

Vol. I
TRANSCRIPT OF RECORD

Supreme Court of the United States

OCTOBER TERM, 1942

No. 696

**A. W. ALTVATER AND THE WESTERN SUPPLIES
COMPANY, PETITIONERS,**

vs.

**BENJAMIN W. FREEMAN AND THE LOUIS G.
FREEMAN CO.**

**ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT
OF APPEALS FOR THE EIGHTH CIRCUIT**

PETITION FOR CERTIORARI FILED FEBRUARY 2, 1943.

CERTIORARI GRANTED MARCH 8, 1943.

TRANSCRIPT OF RECORD.

United States Circuit Court of Appeals

EIGHTH CIRCUIT.

No. 12,241.

CIVIL.

BENJAMIN W. FREEMAN, ET AL.,
APPELLANTS,

VS.

A. W. ALTVATER, ET AL.,
APPELLEES.

APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES
FOR THE EASTERN DISTRICT OF MISSOURI.

FILED FEBRUARY 23, 1942.

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[fol. 1] Notice of Appeal to Circuit Court of Appeals.
(Filed Dec. 23, 1941.)

In the United States District Court,
Eastern District of Missouri
Eastern Division

Benjamin W. Freeman, and The Louis G. Freeman Company, Plaintiffs,	}	In Equity No. 11,629
v.		
A. W. Altvater and The Western Supplies Company, Defendants.		

Notice is hereby given that Benjamin W. Freeman and
The Louis G. Freeman Company, plaintiffs above named,
hereby appeal to the Circuit Court of Appeals for the
Eighth Circuit from the judgment entered in this action
on the 14th day of November, 1941.

ALLEN AND ALLEN,
Attorneys for Plaintiffs,
706 Gwynne Bldg.,
Cincinnati, Ohio.

J. H. SUTHERLAND,
Of Counsel.

Copy Received this 23 day of December, 1941.

LAWRENCE C. KINGSLAND,
Attorney for Defendant.

[fol. 2] Docket entry showing filing of Notice of Appeal by
appellant.

(December 23, 1941)

Plaintiff's notice of appeal to USCCA, 8th Circuit from
judgment entered herein November 14, 1941, bearing ac-
knowledgment of service by counsel for defendant, filed.

[fol. 3]

Bill of Complaint.
(Filed Dec. 5, 1935.)

In the United States District Court
Eastern District of Missouri
Eastern Division

Benjamin W. Freeman, and The
Louis G. Freeman Company,
Plaintiffs,

vs.

A. W. Altvater and The Western
Supplies Company,
Defendants.

In Equity No. 11,629

To the Honorable, the Judges of the District Court of the
United States, for the Eastern District of Missouri,
Eastern Division:

Plaintiffs for their complaint do say that:—

1. The Plaintiff, Benjamin W. Freeman, is a citizen of the State of Ohio, resident of Cincinnati, Ohio, and the Plaintiff, The Louis G. Freeman Company, is an Ohio corporation having its place of business at Cincinnati, Ohio, and having an interest in this cause. Defendant, A. W. Altvater, is a citizen of the State of Missouri, resident of the county of St. Louis, in the Eastern District of Missouri, and The Western Supplies Company is a Missouri corporation having its place of business at St. Louis, Missouri. This action is brought for specific performance of a certain written contract and agreement entered into between the Plaintiff, Benjamin W. Freeman, and the Defendants on January 1, 1929, and being ever since continual and now in force between the parties hereto, and that Plaintiffs have always performed and are ready to continue full performance of their part of said contract, whereas Defendants have failed to fully perform in good faith their [fol. 4] part of said contract, and Plaintiffs have no plain, adequate, and complete remedy at law, but only in Equity.

2. That jurisdiction of this Court is based upon the diverse citizenship of the parties hereto, the Plaintiff, Benjamin W. Freeman being a citizen of the United States and a resident of Cincinnati, Ohio; the Plaintiff, The Louis

G. Freeman Company being a corporation of Ohio, and having its usual place of business in Cincinnati, Ohio, and the Defendant Arthur W. Altvater, being a citizen of the United States and resident of St. Louis County, the Defendant, Western Supplies Co., being a corporation of Missouri and having its usual place of business at St. Louis, Missouri; and the value or the amount involved in controversy exceeds the sum of \$3,000.00, exclusive of interests and costs.

3. That the parties Plaintiff and parties Defendant were, prior to January 1, 1929, involved in disputes and questions involving infringement liability by Defendants of the patent rights of Plaintiffs, and that the agreement or contract of January 1, 1929, for specific performance of certain of the terms of which contract this suit is brought, was entered into to effect a settlement for past infringement by Defendants, and liability for damages, and to cooperate in the protection of the Plaintiffs' said patent, and in the development of the business thereof and thereunder, and to arrange for continued use of Defendants' machine in shoe factories, and manufacture by Defendants of dies, anvils, and masks covered by Plaintiff's United States Letters Patent No. 1,681,033, and the completion of certain machines, 23 in number, as more fully set forth in said contract of January 1, 1929, a copy of which is hereto attached and made a [party] of this Bill and marked "Plaintiffs' Exhibit A." That an important and vital consideration of said contract moving from the parties Defendant was that the said Defendants, and each of them, undertook to cooperate with the Plaintiffs in the protection of Plaintiff's said patent rights as more fully set forth in Clause 16 of said contract as follows:

"16. Licensee agrees that it will not at any time during its life contest the novelty, validity, right, or title of Licensor in and to the aforesaid patent, and the Licensor, as a special consideration therefor and in addition to the considerations heretofore expressed, hereby waives all claims against the Licensee for past infringements and claims for damages heretofore incurred arising out of the continued use of machines, dies, anvils, and masks, from the date of issues of said patent, August 14, 1928, to January 1, 1929, in infringe-

ment of Licensor's said patent, which Licensor may now have against purchasers from Licensee, it being understood however, that the agreement not to contest the novelty, validity, right or title shall not extend beyond the life of this license in the event the same be cancelled by reason of the patent aforesaid being declared invalid in accordance with the provisions of paragraph 18 herein",

and that Defendants under said contract had the right stated as follows, Clause 1:

"The Licensee shall also have the right to furnish masks and dies under said Letters Patent for use with flat bed machines."

4. Plaintiffs say that contrary to said written contract Exhibit "A", attached to this Bill of Complaint, and upon which the same is based, and the promised obligation therein, the Defendants, either jointly or severally, did, since the date of said contract, and without plaintiffs' consent, manufacture and sell or lend, and threaten to and will, unless enjoined, continue to make, sell or lend devices which fall within the monopoly of the plaintiffs' letters patent upon which said contract was based, to-wit, Letters Patent No. 1,681,033, dated August 14, 1928, to-wit: Claims 13, 17, 18, 19, 28 and 32 said devices being known as and sold by the defendants as clamp gauge dies and elevated gauge dies.

[fol. 6] 5. Plaintiffs say that the matter of said contract between the present parties was adjudicated by this Court in a proceeding between the same parties which bears Docket No. 8962 in Equity and in which a decree on mandate was entered by this Court on February 26, 1934, and which is now pending before the Master, all of the matters determined in said decree being res adjudicata between the parties hereto, but that after the trial of said cause on the issues joined on the said original bill of complaint, Plaintiffs having only then had the matter brought to their attention, did duly notify the defendants that they were manufacturing and selling flat bed dies with masks upon which no reports of royalties pursuant to said contract had been made, and demanding that same be accounted for, that as a result of extended correspondence

with relation thereto and conferences thereon, defendants did agree to refrain from further sale of the said dies complained of by the plaintiffs, to-wit, the so-called clamp and elevated gauge dies, but that shortly after entering said agreement, the defendants did in spite of the same, continue to and has since continued to manufacture and sell said dies.

6. Plaintiffs further say that the flat bed dies with mask complained of in this bill, to-wit, the so-called elevated gauge dies and clamp gauge dies, manufactured and sold by the defendants, are and have been of a construction different from the dies brought to the attention of the Court in the original proceeding herein, to-wit, Cause No. 8962, and which were manufactured and sold by the defendants and held to come within the monopoly of the patent on which said contract is based, wherefore, although the issues joined on said original bill of complaint were finally determined in favor of the plaintiffs, and a Master appointed to take accounting, the said dies would [fol. 7] not come within the said accounting proceedings, but require to be presented to this Court in a new or supplemental proceedings, and that Plaintiffs did submit a supplemental bill to this Court, which this Court refused leave to file and hence this original bill is now filed.

7. Plaintiffs say that pursuant to the said contract between them and the defendants, the territory within which sales may be made of flat bed dies with masks by defendants, is limited in Clause 2 thereof, and that the Defendants have not confined themselves to said territory in sales of its so-called elevated gauge dies and clamp gauge dies, and have thus come into competition with plaintiff, The Louis G. Freeman Company, and deprived said plaintiff of its business, and have also entered the territory of licensees of the Plaintiff who are licensed for other limited parts of the United States, all to the irreparable damage of the Plaintiffs.

8. Plaintiffs say that they have been greatly damaged by the production and sale by the defendants of flat bed dies with masks, to-wit, the said so-called elevated gauge dies and said clamp gauge dies of the Defendants, and that the defendants have made substantial profits arising

from said manufacture and sale, and that Plaintiffs will be irreparably injured unless the continued production and sale of same be enjoined, except pursuant to the said contract, and that plaintiffs are entitled to recover of the Defendants their own damages, as well as the gains and profits which the Defendants have made as above recited.

[fol. 8] Wherefore, the Plaintiffs pray the Court:

1. That the said contract of January 1st, 1929, be decreed to be continuing and in full force between the parties hereto up to and including the date of filing of this Bill.

2. That the Defendants, and each of them be ordered and required to carry out a specific performance of the obligations of said agreement with regard to the matters now by this Bill brought to the attention of the Court.

3. That the conduct of the Defendants herein complained of be decreed to be inconsistent with the terms and obligations of said Contract, and that the Defendants and each of them, their agents, employees, servants and workmen, be restrained and enjoined from any such conduct.

4. That the Defendants, their agents, employees, servants and workmen be restrained and enjoined from making and selling, or placing in the hands of shoe manufacturers or others, flat bed dies and masks except as provided for in the said contract, more particularly the so-called clamp gauge dies and elevated gauge dies.

5. For the reference to a Master in this cause to be appointed for accounting for profits and damages, more particularly for all sums of money received by the Defendants for their wrongful acts herein complained of, and for all damages sustained by Plaintiffs through the herein complained of violation of their agreement with Plaintiffs and for Plaintiffs' costs expended in this suit.

[fol. 9] 6. For a writ of subpoena ad respondendum to issue out of this Court directed to said Defendants, and each of them, commanding them to appear and make answer herein, and abide by such further Order, Direction, or Decree as may to this Court seem meet and proper and as justice may require.

7. And Plaintiffs pray for such other and further relief as they, or either of them, may be entitled to in the premises.

BENJAMIN W. FREEMAN,
THE LOUIS G. FREEMAN COMPANY,
By ALLEN & ALLEN,
Their Attorneys.

{fol. 9a}

(Plaintiffs' Exhibit 9.)

License Contract.

This Agreement made this 1st day of January, 1929, by and between Benjamin W. Freeman, of Cincinnati, Ohio, hereinafter called the Licensor and Western Supplies Company, a corporation of Missouri, having its usual place of business at St. Louis, Missouri, and Arthur W. Altvater, of St. Louis, Missouri, principal owner and manager of said Western Supplies Company, hereinafter called Licensee,

Witnesseth:

That, Whereas said Benjamin W. Freeman is the inventor and sole owner of U. S. Letters Patent #1,681,033, dated August 14, 1928, on cut-out machines, and

Whereas, the Licensee has heretofore made certain cut-out machines, dies, anvils and masks, the use of which, since the date of issue of said patent are in infringement thereof, which have been sold to various shoe manufacturers and it is now desired by both parties hereto, to effect a settlement for said infringement and damages, and to arrange for the continued use by the present owners of said machines, dies, anvils and masks, heretofore made and sold by the Licensee, and to arrange for the Licensee to continue to make dies, anvils and masks under said Freeman patent for use in said machines, and other machines licensed under said Freeman patent.

Now, Therefore, this instrument witnesseth that in consideration of the mutual covenants and agreements herein contained and of \$1.00 each to the other paid, receipt of which is hereby acknowledged, it is hereby agreed as follows:

1. A single, indivisible, non-exclusive license is hereby granted by said Licensor under said patent #1,681,033 to the Licensee to make at its factory or factories within the territory covered herein and within 125 miles of St. Louis, Mo., dies, anvils and masks under said patent and to sell [fol. 9b] the same, to manufacturing establishments who have or will have cut-out machines licensed under said patent. The Licensee shall also have the right to furnish masks, and dies under said letters patent for use with flat bed machines.

2. This license to sell such dies, anvils and masks is limited to the following territory, viz., the cities of Vincennes, Ind. and Paducah, Ky., and the States of Missouri, Iowa, Nebraska, Kansas, and Illinois, excepting the city of Chicago and Cook County.

3. The Licensee shall have the right to supply parts or repairs for all machines originally made and sold by the Licensee throughout the territory above enumerated which shall be licensed by Licensor, but not to rebuild such machines nor supply parts for the rebuilding thereof as distinguished from the repairing thereof.

4. Licensee agrees to pay to Licensor, a sum as royalty equal to 15% of the selling price of each die, mask or anvil supplied in accordance with this license, providing that said royalty amounts to not less than \$2.00 on any one item sold hereunder as a unit structure, be it die, mask, anvil or combination of the same sold as an item, in which case the Licensee agrees to pay a royalty of \$2.00 when said 15% does not equal \$2.00.

5. Licensee agrees that it will manufacture all dies, masks, anvils or other articles under this license in a good workmanlike manner and of first class materials and will supply same only for use in licensed machines and for none others, except as set forth in clause 1.

6. Licensee agrees that on each die, mask, anvil or other part made and sold by it under this license, that it will cause to appear the patent number, viz. — "Patent No. 1,681,033", together with Licensee's own name or mark as Licensee.

[fol. 9c] 7. The Licensee is given the privilege of obtaining licenses for cut-out machines which he has formerly

sold to users thereof, or enabling the users thereof to obtain licenses, whereby the dies, anvils and masks covered by this license may be sold for use with said machines, when such machines are equipped with a fixed support or holder for dies which permits of their use in accordance with the Licensor's said patent, or are equipped for operation with a movable support or holder which permits of use under said patent. Thus a cut-out machine having a licensed fixed holder therein or equipped under license for use with a movable holder, bringing the same under said patent, shall be a licensed machine to the end that such fixed holders and equipment for using movable holders can be changed from one machine frame to another. It is agreed that a license fee or sum of \$100.00 per fixed holder or equipment for movable holder shall be paid to said Licensor for the continued use of a licensed machine for the life of said fixed holder or equipment for movable holder or of said patent if it expires earlier; or at the option of licensee or present user of any machine which requires a license, a monthly rental or royalty of \$5.00 per machine, shall be paid Licensor by Licensee or the user for the continued operation of said machine, for its life or the life of the patent. If Licensee or the user of such machines elect to pay the monthly rental or royalty, it shall be paid from January 1, 1929, and when same has been paid for 10 months, yielding \$50.00, then and at such time the Licensee or user may elect to pay the sum of \$50.00, thus making up \$100.00 lump sum royalty for the same or shall continue to pay the \$5.00 monthly charge for the life of the machine, or until its use is discontinued as hereinafter provided. If the use of machines which are carrying a monthly royalty is discontinued then Licensor shall be notified thereof before royalties shall cease, and any license plates employed with the discontinued holders [fol. 9d] and (or) equipment shall be returned to the Licensor by the Licensee or the user, and the holder or equipment shall not be used with the patented dies, anvils or masks thereafter, and the license shall be cancelled so far as concerns the use of said holders and (or) equipment.

The Licensee agrees that in obtaining licenses for machines heretofore sold to shoe manufacturers by it, it shall not impose any condition in respect to obtaining dies, anvils and masks solely from Licensee, provided, however,

that this clause shall not be construed to prevent Licensee from contracting with such shoe manufacturers to reimburse it for any amounts paid by Licensee to Licensor for royalty for the continued use of said machines.

8. The Licensee agrees not to make, sell or distribute any additional machines falling within the monopoly of Licensor's said patent, or convert any cut-out machine into machines falling within said monopoly, but as said Licensee had at its factory in St. Louis, on December 12th, 1928, 23 machines complete or partially complete and unsold, the said Licensee, after the date of this contract, shall have the right of distributing said machines in the licensed territory only, on payment to Licensor of a fixed sum or royalty of \$100.00 for each machine equipped for use in accordance with said patent, said payments to be made promptly on delivery of each machine.

9. Licensor agrees that he will not grant any additional licenses in the future under said patent for the manufacture of dies, masks or anvils under said letters patent within the above specified licensed territory on any more favorable terms without extending the same to the Licensee herein.

10. Licensee agrees to keep separate books of account covering all licensed dies, masks and anvils produced and sold by it and of its other transactions under this license [fol. 9e] and to permit access thereto by Licensor or his representative at reasonable times and to supply copies of said accounts under oath if desired and from time to time as requested.

11. Licensee agrees that it will send to Licensors, accountings, returns and payments by the 20th day of each month of all dies, masks and or anvils made in accordance with this license which it has sold during the preceding month beginning with January 1st, 1929, the returns therefore commencing by February 20, 1929. Said returns shall include four impressions of each die made and sold during the accounting period, together with name of customer and the selling price and date of sale on one of said impressions.

12. Licensor shall, when requested, advise Licensee from time to time of all shoe manufacturing companies, con-

cerns of persons using licensed machines within the territory covered by this license and Licensee agrees that it will manufacture dies, masks, anvils and parts thereof, for use in licensed machines only including machines for which licenses have been obtained in accordance herewith of which Licensee shall submit a complete list.

13. Prior to shipment of dies, anvils or masks to any user of machines requiring license under clause 7 hereof, the Licensee shall submit a list of the machines of the user which are to be licensed machines. Licensors agree that it will thereupon supply a special license substantially in accordance with one of the forms hereto attached, to cover and protect any of the machines heretofore made and sold by Licensee and now in the hands of users which are to be licensed as hereinbefore set forth, and Licensors will supply name plates serially numbered to be applied and affixed by Licensee to the die holders or machines, said name plates to be in such form and terms as Licensors may determine. Licensors shall have the right to inspect said licensed machines from time to time.

[fol. 9f] 14. Licensee is to arrange for the payment of the \$5.00 monthly rental or the sum of \$100.00 for each of said licensed machines mentioned in the preceding paragraph which it has heretofore made and distributed as above set forth and will arrange in connection with monthly payment machines for the collection or payment of the rental, and will remit the monthly rental or royalty payments to Licensors at the same time and as a part of Licensee's monthly returns and royalty payments.

15. It is understood and agreed that irrespective of the provisions of this contract, Licensee shall have the right within the territory herein provided, to sell dies, anvils and masks for use with Licensee's machines now in the hands of users for a period of sixty days without submitting the list of machines which are to be licensed. At the end of said period of sixty days Licensee must submit its preliminary list of machines, and pay the sum due by way of lump sum payment or the monthly rental, and thereafter during the period of sixty days after the time when said preliminary list is submitted, the Licensee shall submit a permanent list and make the payments required under this

contract. Thereafter in case any additional machines are to be included in this list, it shall not be done without the consent of the Licensor.

16. Licensee agrees that it will not at any time during its life contest the novelty, validity, right or title of Licensor in and to the aforesaid patent, and the Licensor, as a special consideration therefor and in addition to the considerations heretofore expressed, hereby waives all claims against the Licensee for past infringements and claims for damages heretofore incurred arising out of the continued use of machines, dies, anvils and masks, from the date of issue of said patent, August 14, 1928, to January 1st, 1929, in infringement of Licensor's said patent, which Licensor may now have against purchasers from Licensee, it being understood, however, that the agreement not to contest the [fol. 9g] novelty, validity, right or title shall not extend beyond the life of this license in the event the same be cancelled by reason of the patent aforesaid being declared invalid in accordance with the provisions of paragraph 18 herein.

17. This license may be cancelled for cause or breach of condition by the Licensor upon first giving thirty days written notice by registered mail of the cause or breach complained of, and if not corrected within said time, a further written notice of cancellation may be sent by registered mail by Licensor to Licensee cancelling this license within an additional thirty days from said second notice, but such cancellation shall not affect the right of Licensor to collect royalties then due.

18. The Licensee agrees to cooperate in the protection of the patent herein licensed and in the development of the business thereof and thereunder but in case said patent is declared invalid, as to the claims covering the combinations manufactured and sold by the Licensee by the final decision of an Appellate Court of competent jurisdiction, or by a Court of competent jurisdiction from which no appeal has been taken, and the time for appeal has expired, then and in such case this license may be cancelled by Licensee.

In Witness Whereof the parties hereto have interchange-

ably set their respective hands and seals, this 27 day of December 1928, at Cincinnati, Ohio.

BENJAMIN W. FREEMAN.

Attest:

MARSTON ALLEN,
ERASTUS S. ALLEN.

WESTERN SUPPLIES COMPANY,
By ARTHUR W. ALTVATER,
Pres.
ARTHUR W. ALTVATER.

Executed in duplicate.

[fol. 9h] Supplemental Agreement.

This agreement made this 1st day of January, 1929 by and between Benjamin W. Freeman of Cincinnati, Ohio, licensor, and The Western Supplies Company, a corporation of Missouri and Arthur W. Altvater, chief owner and manager of said Western Supplies Co., both of St. Louis, Missouri,

Witnesseth:

That, Whereas the said parties have this day entered into a certain License Agreement under said Freeman patent #1,681,033 and whereas it is desired to provide particularly for certain business heretofore transacted with certain customers outside the territory granted the licensee by said agreement of even date herewith;

Now, Therefore, this agreement witnesseth in consideration of \$1.00 each to the other paid and of said license contract of even date herewith and supplemental thereto, it is agreed as follows:

1. Western Supplies Company has heretofore transacted business with the shoe manufacturing concerns listed in the attached schedule and it is agreed that said Western Supplies Company may continue to make dies, anvils or masks for said customers for a period of four months from the date hereof without objection or notice to said cus-

tomers from said Freeman, subject to the terms of the above identified License Agreement other than the territorial provisions.

2. All dies, anvils and masks made and supplied by said Western Supplies Company to any of the customers in attached schedule shall be accounted for under regular royalty therefore as provided in said license contract of even date herewith between the parties hereto.

3. At the end of said period of four months from date hereof the party Freeman shall have the right and option to end all transactions by the Western Supplies Company in supplying anvils, dies and masks to such customers as may be listed in said notice within 90 days thereafter. [fol. 9i] After such notice Western Supplies shall no longer continue to pay a rental charge on said machines in order to class them as licensed machines under said License Agreement.

4. It is the meaning and intention of this supplemental agreement that the Western Supplies Company shall have an undisturbed right to continue its business as if under said License Agreement with the customers on attached schedule outside the territory for which it is licensed in said license contract of even date herewith, without notice or objection from said Freeman for a period of at least four months and may continue same until said licensee is given 90 days notice in writing of said Freeman's election to discontinue the right of Western Supplies Company to transact business with such territorial customers as above provided.

5. Western Supplies states that customers which it desires to retain under the four months contingency enumerated in this supplemental agreement are as follows:

Hoosier Shoe Company, Coldwater, Michigan.
 Shaft-Pierce Shoe Company, Faribault, Minn.
 Red Wing Shoe Company, Red Wing, Wisconsin.
 L. D. Stickles Shoe Company, Red Wing, Wisconsin.
 Foot Schulze & Company, St. Paul, Minn.
 O'Donnell Shoe Company, St. Paul, Minn.
 C. Gotzian & Company, St. Paul, Minn.
 Dunn & McCarthy, Auburn, N. Y.—Binghamton, N. Y.
 Marshall, Meadows & Stewart, Auburn, N. Y.

P. W. Minor & Sons, Batavia, N. Y.
 Cedar Grove Shoe Company, Cedar Grove, Wis.
 Chippewa Shoe Company, Chippewa Falls, Wis.
 Heemholz Shoe Company, Cudahy, Wisconsin.
 Badger State Shoe Company, Madison, Wis.
 B. B. Shoe Company, Milwaukee, Wisconsin.
 Walter Booth Shoe Company, Milwaukee, Wis.
 Doerman Shoe Company, Milwaukee, Wisconsin.
 Idea Shoe Mfg. Company, Milwaukee, Wisconsin.
 [fol. 9j] Huth and James Shoe Company, Milwaukee, Wis.
 Weyanberg Shoe Company, Milwaukee, Wisconsin.
 F. Mayer, Milwaukee, Wisconsin.
 James Shoe Company, Milwaukee, Wis.
 Rich Shoe Company, Milwaukee, Wis.
 Simplex Shoe Company, Milwaukee, Wis.
 A. H. Weinbrenner Company, Milwaukee, Wis.
 Gilbert Shoe Company, Theinsville, Wis.
 Wolfram Shoe Company, Watertown, Wis.
 The Marathon Shoe Company, Wausau, Wis.

In Witness Whereof the parties hereto have interchangeably set their respective hands and seals, the 27 day of December, 1928 at Cincinnati, Ohio.

BENJAMIN W. FREEMAN.

Attest:

MARSTON ALLEN.
 ERASTUS S. ALLEN.

WESTERN SUPPLIES COMPANY, -

By ARTHUR W. ALTVATER,
 Pres.

ARTHUR W. ALTVATER.

Executed in duplicate.

[fol. 9k]

Form A

License Under Freeman Patent #1,681,033.

In consideration of the payment of the sum of \$100.00 each, for the number of machines hereinafter named, receipt whereof is hereby acknowledged, I hereby license and empower

to use anvils, dies and masks made in accordance with U. S. Letters Patent No. 1,681,033, with an aggregate number of cut-out machines heretofore sold to it by The Western Supplies Company of St. Louis, Missouri, provided always that said anvils, dies and masks are purchased from an accredited licensee in good standing under my said Letters Patent. It is agreed that a suitable serial numbered license plate shall be attached to the die holders for the number of machines licensed, or to the machines themselves, and that upon discontinuance of use of any machine operating under my said Letters Patent, the plates shall be turned back to me. It is understood that I (or my personal representative) shall have the right to inspect the cut-out machines or holders of the licensee herein, and that the licensee shall at no time operate a larger number of machines at any one time, under this contract, than the number above set forth.

.....
Accepted:

.....
By

[fol. 91]

Form B.

License Under Freeman Patent \pm 1,681,033.

In consideration of the payment of the sum of \$100.00 each, for the number of machines hereinafter named, paid to me by The Western Supplies Company, of St. Louis, Missouri, receipt whereof is hereby acknowledged, I hereby license and empower to use anvils, dies and masks made in accordance with U. S. Letters Patent No. 1,681,033, with an aggregate number of cut-out machines heretofore sold to it by The Western Supplies Company of St. Louis, Missouri, provided always that said anvils, dies and masks are purchased from an accredited licensee in good standing under my said Letters Patent. It is agreed that a suitable serial numbered license plate shall be attached to the die holders for the number of machines licensed, or to the machines themselves, and that upon discontinuance of use of any

machine operating under my said Letters Patent, the plates shall be turned back to me. It is understood that I shall have the right to inspect the cut-out machines or holders of the licensee herein, and that the licensee shall at no time operate a larger number of machines at any one time, under this license, than the number above set forth.

.....

[fol. 9m]

Form C.

License Under Freeman Patent #1,681,033.

In consideration of the payment of the sum of \$5.00 per month each, for the number of machines hereinafter named, to be paid monthly on or before the tenth of the month by The Western Supplies Company, of St. Louis, Missouri, I hereby license and empower to use anvils, dies and masks made in accordance with U. S. Letters Patent No. 1,681,033, with an aggregate number of cut-out machines, heretofore sold to it by The Western Supplies Company of St. Louis, Missouri, provided always that said anvils, dies and masks are purchased from an accredited licensee in good standing under my said Letters Patent. Should any of the number of machines on which said monthly sum is being paid, be discontinued so far as its use in accordance with said Letters Patent is concerned, the monthly payments shall not cease until I have been notified of said discontinuance, and this license thereby canceled so far as concerns such machine or machines. It is agreed that a suitable serial numbered license plate shall be attached to the die holders for the number of machines licensed, or to the machines themselves, and that upon such discontinuance, the plates shall be turned back to me. It is understood that I shall have the right to inspect the cut-out machines or holders of the licensee herein, and that the licensee shall at no time operate a larger number of machines at any one time, under the license, than the number above set forth.

.....

License Under Freeman Patent #1,681,033.

In consideration of the payment of the sum of \$5.00 per month each, for the number of machines hereinafter-named to be paid monthly on or before the tenth of the month, I hereby license and empower to use anvils, dies and masks made in accordance with U. S. Letters Patent No. 1,681,033, with an aggregate number of cut-out machines, heretofore sold to it by The Western Supplies Company of St. Louis, Missouri, provided always that said anvils, dies and masks are purchased from an accredited licensee in good standing under my said Letters Patent. Should any of the number of the machines on which said monthly sum is being paid, be discontinued so far as its use in accordance with said Letters Patent is concerned, the monthly payments shall not cease until I have been notified of said discontinuance, and this license thereby canceled so far as concerns such machine or machines. It is agreed that a suitable serial numbered license plate shall be attached to the die holders for the number of machines licensed, or to the machines themselves, and that upon such discontinuance, the plates shall be turned back to me. It is understood that I shall have the right to inspect the cut-out machines or holders of the licensee herein, and that the licensee shall at no time operate a larger number of machines at any one time, under this license, than the number above set forth.

If the money is to be paid through Western Supplies Company, then a clause will be added—

“Payment of monthly royalty to be made to Western Supplies Company”.

If to be paid to Freeman direct, then added clause—

“Payment to be made to B. W. Freeman, 909 Sycamore Street, Cincinnati, Ohio”.

.....

[fol. 9o] License Under Freeman Patent #1,681,033.

In consideration of the payment of the sum of \$5.00 per month each, for the number of machines hereinafter named to be paid monthly on or before the tenth of the month, I hereby license and empower to use anvils, dies and masks made in accordance with U. S. Letters Patent No. 1,681,033, with an aggregate number of cut-out machines, heretofore sold to it by The Western Supplies Company of St. Louis, Missouri, provided always that said anvils, dies and masks are purchased from an accredited licensee in good standing under my said Letters Patent. Should any of the number of the machines on which said monthly sum is being paid, be discontinued so far as its use in accordance with said Letters Patent is concerned, the monthly payments shall not cease until I have been notified of said discontinuance, and this license thereby canceled so far as concerns such machine or machines. It is agreed that a suitable serial numbered license plate shall be attached to the die holders for the number of machines licensed, or to the machines themselves, and that upon such discontinuance, the plates shall be turned back to me. It is understood that I shall have the right to inspect the cut-out machines or holders of the licensee herein, and that the licensee shall at no time operate a larger number of machines at any one time, under this license, than the number above set forth.

If the money is to be paid through Western Supplies Company, then a clause will be added—

“Payment of monthly royalty to be made to Western Supplies Company”.

If to be paid to Freeman direct, then added clause—

“Payment to be made to B. W. Freeman, 909 Sycamore Street, Cincinnati, Ohio”.

.....

[fol. 10] (Motion of Defendants to strike parts of Bill of Complaint.)

(Filed December 28, 1935.)

Now come the defendants and under the provisions of Equity Rule 21 move the Court to strike out the following parts of the bill of complaint herein, to-wit:

That part of paragraph 3 beginning in line 1, of page 3 and extending through line 27, beginning with the words "That an important" and ending with the words "flat bed machines".

That part of paragraph 5 beginning in line 6, of page 4, reading as follows: "all of the matters determined in said decree being res adjudicata between the parties hereto."

That part of paragraph 6 beginning in line 9, and reading as follows: "wherefore, although the issues joined on said original bill of complaint were finally determined in favor of the plaintiffs."

That part of paragraph 8 beginning in line 10 and reading as follows: "as well as the gains and profits which the defendants have made as above recited."

[fol. 11] The ground for this motion is that said parts of the bill of complaint hereinbefore particularly identified contain redundant and impertinent matter.

LAWRENCE C. KINGSLAND,

Solicitor for Defendants.

Service of the foregoing Motion to Strike is acknowledged this 28th day of December, 1935.

JOHN H. BRUNINGA,

Solicitor for Plaintiffs.

[fol. 12] (Motion of Plaintiffs for Leave to amend Bill of Complaint.)

(Filed January 13, 1936.)

Now comes plaintiffs in the above-entitled cause and move that the original Bill of Complaint in the above entitled cause be amended by interlineation as follows:

In Paragraph 3, cancel the subject matter beginning line 1, page 3 of the Bill with the words "That an important" and extending through line 27 ending with the words "flat bed machines".

In Paragraph 5, cancel the subject matter in line 6 and 7 on page 4 reading as follows: "all of the matters determined in said decree being res adjudicata between the parties hereto,".

In Paragraph 6 cancel the subject matter beginning in line 9 thereof, with the words "the issues joined" and extending to line 11 through "the plaintiffs, and". After the word "Master" in line 11 insert the word "was".

[fol. 13] In Paragraph 8, cancel the subject matter beginning in line 10 thereof, and reading as follows: "as well as the gains and profits which the Defendants have made as above recited."

The foregoing amendments will fully overcome and dispose of the objections raised by defendants' Motion to Strike as to Paragraphs 3, 5 and 8; and as to Paragraph 6 defendants' counsel has agreed that the amendment made disposes of the substance of the objection raised by defendants' Motion to Strike.

Wherefore, plaintiffs pray that the aforesaid amendments be made by interlineation to the original Bill and that an Order be entered removing Defendants' Motion to Strike from the Motion Docket of this Court and requiring defendants to file their answer within twenty (20) days.

BRUNINGA AND SUTHERLAND,
[Solicitor] for Plaintiffs.

St. Louis, Mo.
January 13, 1936.

[fol. 14] (Order granting leave to amend Bill of Complaint,
etc.)

(Filed January 13, 1936.)

In the United States District Court
Eastern District of Missouri
Eastern Division

Benjamin W. Freeman and The
Louis G. Freeman Company,
Plaintiffs,

vs.

A. W. Altvater and The Western
Supplies Company,
Defendants.

In Equity No. 11,629

Upon application of plaintiffs and it appearing that the amendments made by plaintiffs' "Motion for Leave to Amend the Original Bill of Complaint" fully dispose of the objections raised by defendants' Motion to Strike filed herein on December 28, 1935, It Is Hereby Ordered that the amendments be made and that defendants' Motion to Strike be removed from the motion docket of this Court.

And, it is Further Ordered that defendants file their pleading to the Bill of Complaint in the above-entitled cause within twenty (20) days from the date hereof.

Signed and entered this 13th day of January, 1936.

CHARLES B. DAVIS,
United States District Judge.

Consented To:

LAWRENCE C. KINGSLAND,
Attorney for Defendants.

[fol. 15]

Answer.

(Filed February 1, 1936.)

Defendants Answer the Bill of Complaint as Amended
Herein as Follows:

I.

Defendants, answering Paragraph 1 of the Bill of Complaint, admit the citizenship and residence of the plaintiffs

and defendants, respectively, as alleged in the Bill of Complaint; admit that on January 1, 1929, Benjamin W. Freeman, plaintiff, and defendants entered into a certain written contract and agreement, a copy of which is attached to the Bill of Complaint and marked Exhibit A, but defendants deny that they have failed to fully perform any part of said agreement; deny that The Louis G. Freeman Company, one of the plaintiffs herein, has any interest in this suit; deny that the plaintiffs, or either of them, have any cause of action arising under, from or by reason of said agreement; and deny that the plaintiffs, or either of them, have no plain, adequate and complete remedy at law.

II.

Answering Paragraph 2 of the Bill of Complaint, defendants admit the diversity of citizenship as alleged in [fol. 16] said Paragraph, but deny that the value or the amount involved in controversy exceeds the sum of Three Thousand Dollars (\$3,000.00), exclusive of interest and costs.

III.

Answering Paragraph 3 of the Bill of Complaint, defendants deny the same and leave plaintiffs to make such proof thereof as they are advised, but this denial is not to be construed to be a denial of said agreement according to its terms and conditions as they appear in full in Exhibit A attached to the Bill of Complaint herein.

IV.

Answering Paragraph 4 of the Bill of Complaint, defendants deny that they have, either jointly or severally, since the date of the contract alleged in the Bill of Complaint, without plaintiffs' consent, manufactured or sold or loaned, or that they threaten to continue to make, sell or lend any device or devices which fall within the monopoly of United States Letters Patent No. 1,681,033, dated August 14, 1928, or within claims 13, 17, 18, 19, 28 and 32 of said patent, and specifically deny that devices known as clamp gauge dies and elevated gauge dies sold by defendants, or either of them, are within the monopoly of said patent, or any one of said claims specifically mentioned.

V.

Answering Paragraph 5 of the Bill of Complaint, defendants admit that the subject matter of the contract referred to in the Bill of Complaint was involved in a proceeding between the parties hereto, and that said suit was known as No. 8962, In Equity, and that in said suit a decree on mandate was entered by this Court on February 26, 1934; defendants admit that they were notified that they were [fol. 17] manufacturing and selling flat bed dies with masks upon which no reports of royalty, pursuant to said contract, had been made, but deny that they agreed to refrain from further sale of said dies complained of by plaintiffs; and defendants allege that at no time have they, or either of them, manufactured or sold clamp gauge dies and elevated gauge dies in violation of any agreement with plaintiffs.

VI.

Answering Paragraph 6 of the Bill of Complaint, defendants admit that the clamp gauge dies and elevated gauge dies manufactured and sold by the defendant, Western Supplies Company, alleged by the plaintiffs to be within the monopoly of said letters patent as above identified, are and have been of a construction different from the dies brought to the attention of the Court in cause No. 8962, In Equity; defendants admit that a Master was appointed to take an accounting in said Cause No. 8962, in Equity, and admit that the dies complained of herein were held by said Master in said accounting proceedings not to come within the decree in said Cause No. 8962, in Equity; defendants admit that the plaintiffs herein submitted a Supplemental Bill of Complaint to this Court in said cause, seeking to involve the devices referred to in the Bill of Complaint herein, and that this Court refused leave to file said Supplemental Bill; but deny that any matters or things recited in Paragraph 6 of the Bill of Complaint form any basis of right in the plaintiffs to maintain the Bill of Complaint herein.

VII.

Answering Paragraph 7 of the Bill of Complaint, defendants deny that the defendants' right to sell flat bed dies with masks is limited by clause 2 of the contract re-

ferred to in the Bill of Complaint, or in any other provision thereof; but defendants admit that the defendant, [fol. 18] Western Supplies Company, has sold clamp gauge dies and elevated gauge dies in territory without the limit of clause 2 of said contract; and defendants allege that they have the right so to do; defendants deny that they have illegally or unlawfully or in contravention of said contract in any wise entered into competition with the plaintiff, The Louis G. Freeman Company, or have deprived said plaintiffs, or licensees of plaintiffs, of any business to which it or they are legally entitled, and deny that they have caused irreparable damage to plaintiffs, or either of them.

VIII.

Answering Paragraph 8 of the Bill of Complaint, defendants deny that they have damaged plaintiffs, or either of them, by the production and sale of clamp gauge dies or elevated gauge dies, and deny that they have made substantial profits from the manufacture and sale of said dies to which plaintiffs, or either of them, are entitled, and deny that plaintiffs will be damaged by the continued production and sale of said dies, and deny that plaintiffs are entitled to recover from defendants, or either of them, any damages whatever.

Defendants Pleading Further and by Way of Affirmative Defense Allege:

IX.

That when the application was filed in the Patent Office for letters patent 1,681,033, limitations were contained in the specification and claims thereof; that further, while said application was pending in the Patent Office, claims of broader scope were presented and were rejected by the Patent Office, and in response to such rejection, said application was restricted by the cancellation of said broader claims by the applicant acquiescing in the rejection; and further that, during such pendency of said application in [fol. 19] the Patent Office, restricting amendments were made therein and statements limiting the scope of the alleged invention were made by the applicant, as inducements to the allowance of claims therein; and that, by reason of each and all of such limitations and restrictions at

the time of filing of said application and during its pendency in the Patent Office, the claims declared on in the Bill of Complaint are so limited that none of them can be held to include within its scope the clamp gauge dies or elevated gauge dies charged in the Bill of Complaint and that, therefore, said dies are not within the monopoly of said patent or within the scope of the aforementioned agreement between the parties to this suit.

X.

That the scope of the monopoly purported to be covered by the patent in suit, and particularly by the claims declared on in the Bill of Complaint, must be limited to exclude the clamp gauge dies and elevated gauge dies made or used by the defendants that are alleged to be within said monopoly, when said claims are construed in view of knowledge, publications, public uses, and patents, United States and foreign, which knowledge, publications, public uses or patents were prior to the date of the inventions and improvements of the said claims declared on, or more than two years prior to the date of filing the application for the patent in suit, and that among the prior patents, publications and uses are the following:

[fol. 20]

Prior Patents.

No. 180,672,	Aug. 1, 1876,	Stimpson
" 320,228,	June 16, 1885,	Cotton
" 360,933,	Apr. 12, 1887,	Valiant et al.
" 573,274,	Dec. 15, 1896,	Kemp
" 642,878,	Feb. 6, 1900,	Schneider
" 673,909,		Kimball
" 919,500,	Apr. 27, 1909,	Van Kamp
" 1,174,750,	Mar. 7, 1916,	Mayo
" 1,430,697,	Oct. 3, 1922	Stanbon
" 1,430,710,	Oct. 3, 1922	Whitcomb
" 1,434,060,	Oct. 31, 1922	Lautenschlager
" 1,439,019,	Dec. 19, 1922	Newton
" 1,448,751,	Mar. 20, 1923,	Knight
" 1,475,181,	Nov. 27, 1923,	Furber
" 1,522,533	Jan. 12, 1925	Newman et al.

...

German patent No. 170,279, Mahlmann.

...

Prior Users.

International Shoe Co.,	St. Louis, Missouri,
Johansen Bros. Shoe Co.,	St. Louis, Missouri,
Pedigo-Weber Shoe Co.,	St. Louis, Missouri,
Menigan Shoe Co.,	Rochester, New York,
	and
Robinson-Bynon Shoe Co.,	Auburn, New York.

[fol. 21]

XI.

That the clamp gauge dies and elevated gauge dies alleged in the Bill of Complaint herein to be within the monopoly of said patent No. 1,681,033, do not contain the subject matter of the claims declared on in the Bill of Complaint herein but, on the contrary, follow the teachings of the prior knowledge and art, except for detail refinements which were developed solely by these defendants.

XII.

That as early as December, 1931, and immediately thereafter, the plaintiffs knew of the manufacture and sale by the defendant, Western Supplies Company, of flat bed dies with masks alleged in the Bill of Complaint to be within the monopoly of said patent No. 1,681,033, and knew that the defendants claimed the right to continue to manufacture and sell said dies as structures without the monopoly of said Freeman patent No. 1,681,033, and as not within the scope of the contract declared on in the Bill of Complaint; that plaintiffs had said knowledge prior to the date upon which the decree in the suit between the same parties, referred to in the Bill of Complaint and known as No. 8962, in Equity, was entered; that by reason of said knowledge and because of plaintiffs' failure to include said dies as a part of the issues of said suit, and by reason of the long delay subsequent thereto, plaintiffs have no [stand] in equity and, because of said laches and inactivity of the plaintiffs over a long period of time, the plaintiffs have acquiesced in defendants' claim of right to manufacture and sell the dies alleged in the Bill of Complaint herein as within the monopoly of the patent and, relying upon said acquiescence, defendants have built up their business in the

manufacture and sale of said dies and have expended large [fol. 22] sums of money in and about the manufacture and sale of said dies, by reason of which the plaintiffs are now estopped from maintaining this suit.

XIII.

That the contract, for the specific performance of which this suit is brought, contains, in Paragraph 17 thereof, a provision that it may be cancelled by licensor for cause or a breach of any condition thereof on the part of the licensee, and said contract does not include any similar right of cancellation on the part of licensee; and that, by reason thereof, a Court of Equity is, without jurisdiction to compel specific performance of the contract, as plaintiffs have a full, adequate and complete remedy at law, and it would be against equity to compel specific performance of the contract as the same lacks mutuality.

XIV.

That this suit cannot be maintained as parties plaintiff are misjoined, for the reason that The Louis G. Freeman Co. is not a party to the contract and has no interest in the cause of action attempted to be stated in the Bill of Complaint, and that whatever cause of action the said The Louis G. Freeman Co. has against the defendants, or either of them, is not joint with the other plaintiff, Benjamin W. Freeman.

XV.

That this suit cannot be maintained in equity against A. W. Altvater, for the reason that the said A. W. Altvater has acted in respect of the manufacture and sale of the dies alleged by plaintiffs to be within the monopoly of said Patent No. 1,681,033, only within his scope of authority as President of the other defendant, Western Supplies Co.

[fol. 23] Wherefore defendants, having fully answered, pray that the Bill of Complaint herein be dismissed for lack of equity, with costs to defendants.

LAWRENCE C. KINGSLAND,

Solicitor for Defendants.

St. Louis, Missouri,
January 31, 1936.

[fol. 24] (Interrogatories propounded by Defendants to be answered by Plaintiffs.)

(Filed February 20, 1936.)

Now come the defendants in the above entitled suit and, in accordance with the provisions of Equity Rule 58, propound the following interrogatories to be answered by plaintiffs, Benjamin W. Freeman and The Louis G. Freeman Company, the answers by the last named plaintiff to be supplied by the President or any other official who best may give the information for the Company.

1.

Specify the interest of the party, The Louis G. Freeman Company in the contract in suit, set out as Exhibit A of the Bill of Complaint.

2.

If said interest under Interrogatory 1 obtains through written instruments, assignments, licenses, or otherwise, furnish a copy of each of all such instruments.

3.

If said interest under Interrogatory 1 obtains through an unwritten agreement, supply full details of such agreement.

[fol. 25]

4.

Specify the interest of the party, The Louis G. Freeman Company, in Letters Patent No. 1,681,033.

5.

If said interest stated under Interrogatory 4 obtains through written instruments, assignments, licenses, or otherwise, furnish a copy of each of all such instruments.

6.

If said interest stated under Interrogatory 4 obtains through an oral agreement, supply full details of such agreement.

7.

If not supplied by previous answers, give the following information concerning the relation between The Louis G. Freeman Company and Benjamin W. Freeman:

(a) What interest, if any, in said Letters Patent No. 1,681,033, remains in Benjamin W. Freeman?

(b) Have the respective interests in said Letters Patent changed since January 1, 1929; and if so, in what respects?

(c) What interest, if any, in said contract, Exhibit A, remains in Benjamin W. Freeman?

(d) Have the respective interests in said contract, Exhibit A, changed since January 1, 1929; and if so, in what respects?

(e) Does The Louis G. Freeman Company receive any sums paid under said contract by defendants, or either of them, to Benjamin W. Freeman?

[fol. 26]

8.

State specifically what clauses of the contract mentioned in the Bill of Complaint and designated Exhibit A, plaintiffs will contend have been breached by the defendants.

9.

State which of the clauses stated in the previous answer have been breached by each separate defendant.

10.

Does The Louis G. Freeman Company manufacture clamp gauge dies and elevated gauge dies under said Letters Patent?

11.

Does The Louis G. Freeman Company make, sell, use, or distribute clamp gauge dies or elevated gauge dies in any place or territory in which defendants are alleged by the Bill of Complaint to have acted in violation of this agreement; and if so, in what territories, giving cities or towns?

12.

State specifically what violations of said contract in suit have been committed by the defendant, Arthur W. Altvater, in his personal capacity.

13.

State where said defendant, Arthur W. Altvater, has committed such acts described in the previous answer.

14.

State, with regard to the alleged violations of said contract by The Western Supplies Company:

(a) A specific illustration of each and every [separate] type of such alleged violation.

(b) Where (town or city, and state) each alleged violation took place, this answer not being limited to the types of violations set forth in section (a) of this Interrogatory.

[fol. 27]

15.

Describe and define what is meant by

(a) clamp gauge dies and

(b) elevated gauge dies

as referred to in the Bill of Complaint, and which plaintiffs will rely upon as violations of the contract.

16.

Specify and describe, or illustrate, all elevated gauge dies, clamp gauge dies, and any other apparatus, now or heretofore made, used, or sold by defendants or either of them, that will now or later be charged as violating said contract, or in any way brought into this suit.

17.

Specify what claim or claims of said Letters Patent will be charged to read upon each of said apparatuses set out in the answer to Interrogatory 18, taken separately.

18.

State whether a clamp gauge die or an elevated gauge die having a mask or clamp extending

(a) only on one side of the cutting edges of the dies, or

(b) radially not more than 90° around the said cutting edges

will be charged as dies having masks partially surrounding said cutting edges, or the equivalent thereof.

19.

State whether a clamp gauge die or an elevated gauge die having a mask or clamp extending

(a) only on one side of the cutting edges of the dies, or

[fol. 28] (b) radially not more than 90° around the said cutting edges, and in either case not having an enclosed opening,

will be charged as dies with one or more openings to partially surround the cutting edges of the dies, or the equivalent thereof.

20.

State whether clamping members on such devices, which clamping members may be engaged by an unstepped graduation of pressure, without any definite intermediate stop therefor, onto the shoe upper material, will be charged as providing a preliminary yielding engagement permitting adjustment of the material, and subsequently a firm holding engagement therewith, or its equivalent.

21.

State when plaintiffs, or either of them first knew of the breach of contract charged in the Bill of Complaint.

22.

State what licenses have been granted, as set out in Paragraph 7 of the Bill of Complaint, producing a true copy of each such license.

23.

If any of the licenses referred to in Paragraph 7 of the Bill of Complaint is not written, then state all the details of such license, or licenses.

24.

If the previous answers have not supplied it, then state the territory or territories in which each licensee is empowered to operate under its license.

[fol. 29]

25.

State whether any licensee under any license referred to in Paragraph 7 of the Bill of Complaint has reported to plaintiffs, or either of them, competition with the goods of the defendants herein, or by any acts of the defendants herein, or either of them, as charged in said paragraph; and if so, state

- (a) when the report was made,
- (b) the nature of such competition,
- (c) Whether any sales were lost to such licensees by said competition,
- (d) what territory said competition took place in,
- (e) what specific articles or acts of defendants, or either of them, constituted such competition in violation of the license agreement set out as Exhibit A thereof.

LAWRENCE C. KINGSLAND,
Solicitor for Defendant.

St. Louis, Missouri
Feb. 20, 1936.

Note:

Interrogatories Nos. 1 to 9 inclusive are to be answered by plaintiff, The Louis G. Freeman Company; Interrogatories 10 to 25 both inclusive are to be answered by either of the plaintiffs, said answers to be under oath.

Received copy of Interrogatories from Clerk 2-21-36.

J. H. SUTHERLAND,
by S. HARTZ.

[fol. 30] Motion of Plaintiffs for Bill of Particulars by Defendants.

(Filed Feby. 21, 1936.)

Now come the plaintiffs and move the Court that it require of the defendants to file with this Court [of] Bill of Particulars in which it states:—

1. Just what the alleged prior uses are to which they refer in paragraph 10 of the answer, as being had by International Shoe Co., Johansen Bros. Shoe Co., Pedigo-Weber Shoe Company, Manigan Shoe Company and Robinson-Bynon Shoe Company. If the defendants will state when and where the plaintiffs can view any prior use devices to which reference is had in connection with the said companies, this will be a satisfactory reply to this particular.

2. Make reference specifically to those points in the proceedings whereby plaintiff, B. W. Freeman, obtained his letters patent, which will be relied upon as showing an estoppel as [plead] in paragraph 9 of the answer of the defendants.

BENJAMIN W. FREEMAN

and

THE LOUIS G. FREEMAN COMPANY,

By ALLEN & ALLEN,

Attorneys.

Service of the foregoing Motion of Plaintiffs for Bill of particulars by Defendant acknowledged this 21st day of February, 1936.

LAWRENCE C. KINGSLAND,

Atty. for Def.

[fol. 31] (Answer in part and Objection in part of Plaintiffs to Interrogatories propounded by Defendants.)

(Filed February 21, 1936.)

Now come the plaintiffs and make the following answer in part and objection in part to the interrogatories propounded by the defendants.

1. In answer to interrogatories 1 through 7, the relationship of the individual and corporate plaintiffs in this cause are the same as was established in the former cause between these same parties as to the same contract, as the contract, Exhibit A herein, and as to the same patent. The patent No. 1,681,033 remains in the name of Benjamin W. Freeman. Contracts are made by him with the several licensees, and infringement suits under said patent are brought in his name. The royalty money paid in by the licensees go to The Louis G. Freeman Co., which company pays litigation expenses and attorney fees. The Company pays Benjamin W. Freeman a salary which includes compensation for his services and also for the value of the foregoing arrangement. The understandings above noted are not in writing.

2. Plaintiffs object to interrogatories 8 to 11 inclusive, on the ground that they relate to matters which are not [fol. 32] part of the defense in this cause, but instead are nothing but inquiries into plaintiffs cause of action.

3. Plaintiffs object to interrogatories 12 and 13 on the ground that they are merely an inquiry into the case for the plaintiffs and do not relate to the defense. Altwater knows what he has done, and is here merely seeking information as to what plaintiffs contend with relation to his conduct.

4. Plaintiffs object to interrogatories 14, to 20 inclusive since they relate professedly to nothing but the plaintiffs case.

5. In answer to interrogatory 21, which plaintiffs will contend relates to a defense made by the defendants which is of no weight in law, the breach of contract charged in the Bill of Complaint came to the notice of plaintiffs beginning in the Fall of 1931, and promptly when plaintiffs had gathered the information and had time to present it to counsel, a letter was written to the defendants dated Dec. 1931, the date of which letter is to be found in the answer of the defendants in this cause.

6. Plaintiffs object to interrogatories 22 to 25 inclusive, on the ground that the matters inquired about relate to

the case for the plaintiff and not to the case for the defendants.

.

[fol. 35] (Stipulation that Defendants will answer Part 1 of Motion of Plaintiffs for Bill of Particulars, etc.)

(Filed March 12, 1936.)

It Is Hereby Stipulated, by and between counsel for the parties to the above entitled cause, the honorable Court consenting: that defendants will answer Part 1 of the "Motion of Plaintiffs for Bill of Particulars by Defendants" filed on or about February 20, 1936; and that plaintiffs hereby withdraw said motion as to Part 2 thereof.

BRUNINGA AND SUTHERLAND,
[Solicitor] for Plaintiff.

LAWRENCE C. KINGSLAND,
Solicitor for Defendants.

[fol. 36] Defendants' Answers to Plaintiffs' Interrogatories.

(Filed April 16, 1936.)

Answering plaintiffs' interrogatories, defendants state as follows:

1.

Concerning plaintiffs' Exhibit 1:

(a) Yes; this die was manufactured etc. by Western Supplies Co.

(c) Rochester, New York.

2.

Concerning plaintiffs' Exhibit 2:

(a) Yes, this die was manufactured etc. by Western Supplies Co.

(c) Cannot be answered without further information from plaintiffs, but, if plaintiffs will indicate the place where it was found, defendants may be able to answer the interrogatory.

3.

(a) No, this die was not made by Western Supplies Co.

(c) See (a).

[fol. 37]

4.

Concerning plaintiffs' Exhibit 4:

(a) Yes, this die was manufactured, etc. by Western Supplies Co.

(c) Sullivan, Ill.

5.

Concerning plaintiffs' Exhibit 5:

(a) Yes, this die was manufactured, etc. by Western Supplies Co.

(c) Moberly, Mo.

THE WESTERN SUPPLIES COMPANY,
By ARTHUR W. ALTVATER,
President.

ARTHUR W. ALTVATER,
Pro Se.

Arthur W. Altvater, being duly sworn, says that the above answers are full, true and complete responses to the interrogatories propounded by plaintiffs, insofar as they can be given.

ARTHUR W. ALTVATER.

Subscribed and sworn to before me this 14 day of April, 1936.

GEO. H. STEPHENS,
Notary Public.

My commission expires Sept. 19, 1937.

Service of the foregoing acknowledged, with waiver of requirement to answer part (b) of any interrogatory.

BRUNINGA & SUTHERLAND,
Attorneys for Plaintiff.

[fol. 38] (Amended Interrogatories propounded by Plaintiffs to Defendants.)

(Filed June 12, 1936.)

Now come the plaintiffs and submits that the answers to interrogatories by the defendants in this cause are not full and complete, and request further information of the plaintiffs, and accordingly the plaintiffs submit the following, which they pray the Court to allow as additional interrogatories in order to obtain complete answers of the defendants.

1. Hereto attached is an amended drawing marked Exhibit 3, to take the place of the former drawing, Exhibit 3, which drawing now shows the particular die in question numbered correctly and with a correct relationship of handles thereto, and asks of the defendants:

(a) Was a die as illustrated in the attached drawing, Ex. 3, manufactured and sold by the defendants since the issuance of the patent in suit, and prior to the filing of the [fol. 39] Bill of Complaint herein? If not, wherein does it differ from defendants' die of the number noted?

(b) State the geographical location of the factory to whom this die was sold.

2. The plaintiffs hereby advise that the die shown in photographs Ex. 2 and 2a of the former interrogatories, was obtained in Chicago, Illinois. Accordingly will defendants kindly

(c) State the geographical location of the factory to whom this die was sold?

BENJAMIN W. FREEMAN, et al.,

By BRUNINGA AND SUTHERLAND,

Attorneys and Solicitors.

MA*P

[fol. 40] Defendant's Answers to Plaintiffs' Amended Interrogatories.

(Filed June 12, 1936.)

In Answering Plaintiffs' amended interrogatories, defendants state as follows:

1.

Concerning Exhibit 3-A

(a) Yes; the die was manufactured, etc. by The Western Supplies Company.

(b) Vincennes, Indiana.

2.

Concerning plaintiffs' exhibits 2-A and 2-B

(C) Chicago, Illinois.

THE WESTERN SUPPLIES COMPANY,

By LAWRENCE C. KINGSLAND,

Attorney.

St. Louis, Missouri

June 11, 1936

[fol. 41] Supplement to Bill of Complaint.

(Filed June 5, 1937.)

In the United States District Court
Eastern District of Missouri
Eastern DivisionBenjamin W. Freeman and The
Louis G. Freeman Company,
Plaintiffs,

vs.

A. W. Altvater and The Western
Supplies Company,
Defendants.

In Equity No. 11629

Now come plaintiffs in the above entitled cause and pursuant to the provisions of Equity Rule 34 supplement the original Bill of Complaint with the following statement of facts occurring after the filing of said original Bill:

"4a. The plaintiffs say that since the filing of their original bill herein, Letters Patent No. 1,681,933 have been surrendered and reissued in two patents, the subject matter involved in this suit being covered by U. S. Letters Patent Re-issue No. 26,202 dated December 8th, 1936, printed copy of which is hereto attached,

that this re-issue letters patent has been substituted along with the other re-issue patent in the contract Exhibit A, attached to the Bill of Complaint herein as and for said original patent No. 1,681,033; and that the sixth and seventh claims of said re-Issue letters patent No. 20,202 are identical with claims 18 and 19 [fol. 42] of the said original patent No. 1,681,033, the other claims of the re-issue being either the same or modifications more clearly expressing the invention than certain claims of said original patent; wherefore said Re-issue patent No. 20,202 is substituted for said original Letters Patent in the Bill of Complaint herein as stating the rights of the plaintiffs on and after the 8th day of December, 1936, as to claims 1 through 7 thereof. That promptly after the granting thereof, plaintiffs did notify defendants of the granting of the said re-issue patents enclosing copies thereof, that the defendants duly accepted the notice and continued in the performance of the said contract as before the re-issues were granted, and defendants did ratify and accede to the said substitution."

The foregoing paragraph 4a shall be inserted in the original Bill following Paragraph 4 thereof.

BENJAMIN W. FREEMAN and
THE LOUIS G. FREEMAN COMPANY,

ALLEN AND ALLEN,

By BRUNINGA AND SUTHERLAND,
Attorneys.

St. Louis, Mo.
June 5, 1937.

[fol. 43] (Answer of Defendants to Supplement to Bill of Complaint.)

(Filed October 6, 1937.)

Now come the defendants, Arthur W. Altvater and Western Supplies Company, who, in response to the Supplement to the Bill of Complaint filed herein, and in addition to the answer already filed, do further answer as follows:

1.

Defendants admit that since the filing of the original Bill of Complaint herein, letters patent 1,681,033 has been surrendered and terminated, and they admit that two purported reissues thereof, bearing numbers 20,202 and 20,203 have been issued, but defendants deny their validity.

2.

Defendants admit that reissue letters patent 20,202 purports to cover mask dies as distinguished from machines, but they deny that said reissue covers the subject matter of this suit.

[fol. 44]

3.

Defendants deny that reissue letters patent 20,202 and reissue letters patent 20,203, or either of them, have been substituted in the contract, plaintiff's Exhibit A, either in place of said original letters patent or otherwise.

4.

Defendants admit that claims 6 and 7 of said reissue letters patent 20,202 are identical with claims 18 and 19 of the said original letters patent 1,681,033, but they deny that the other claims of the said reissue are either the same or modifications more clearly expressing the invention than certain claims of the original patent; and they state that said reissue letters patent 20,202 is invalid.

5.

Defendants, as above, deny the substitution of reissue letters patent 20,202 in the contract noted, and they further deny that it states any rights of the parties at any time or with respect to any claims.

6.

Defendant, Western Supplies Company, admits that it received a letter from plaintiffs dated December 9, 1936 enclosing copies of the reissue letters patent, but the defendants deny that this letter had any legal effect, and defendants, and each of them, specifically deny that this

letter had any effect to produce a substitution of the reissue letters patent 20,202 or 20,203 in the original contract, and the defendants further deny that they have ratified or acceded to any substitution of the reissues, or either of them, in the contract.

[fol. 45]

7.

Defendants admit that since the date of the reissue letters patent they have paid royalties to the plaintiffs, but they deny that such payments were without protest, and they deny that any such payments were in ratification of the substitution of the reissue patents, or either of them, in the contract, and they say, as set out hereafter, that they paid because the reissues purported, however, falsely, to cover these dies upon which payment was made, so that they were rendered subject to an immediate infringement suit if they did not pay.

Further, by way of answer, the defendants state:

8.

That on or about August 6, 1933 the plaintiff herein, Benjamin W. Freeman, filed a suit in the United States District Court for the District of Massachusetts, No. 3909, in Equity, against Premier Machine Co. (hereinafter referred to as Freeman v. Premier), alleging that the said Premier Machine Co. infringed twenty-six claims of said original letters patent 1,681,033. The District Court in Freeman v. Premier found the said patent valid and infringed, as reported in 2 F. Supp. 761. Upon appeal taken about October 1, 1935, the decision of the District Court was reversed by the United States Circuit Court of Appeals for the First Circuit, in which twenty-three of the twenty-six claims sued upon (including claims 13 and 17 herein sued upon) were held invalid and wholly without merit, and three claims, 18, 70, and 81, were held valid, but restricted to certain limited scope, as shown in the opinion report in 84 F. (2d) 425. By said decision it was adjudged that Freeman was not the inventor of certain structures of the type accused in the present suit.

[fol. 46]

9.

That in the bill of complaint in the suit of Freeman v. Premier it was averred by the plaintiff Freeman that the claims in suit in the case of Freeman v. Altvater No. 8962, referred to in paragraphs 5 and 6 of the original bill of complaint herein, were equal or broader in scope than those specified in the Freeman v. Premier suit. Wherefore in view of the invalidity of the said claims, it is alleged that plaintiffs are now estopped to maintain that the claims are not invalid and void, and that reissue letters patent 20,203 which fraudulently reasserts said claims, is not invalid and void.

10.

Following the decision aforesaid of the First Circuit Court of Appeals in Freeman v. Premier, the plaintiff Freeman petitioned for a writ of certiorari to the Supreme Court of the United States, but the petition was denied. In this petition for certiorari, the plaintiff Freeman averred as a ground for granting the same that the decision of the First Circuit in Freeman vs. Premier conflicted in substance with that of the Eighth Circuit in Freeman v. Altvater, No. 8962, on the claims involved in the two suits. Specifically, Freeman set forth before the Supreme Court that certain claims adjudicated and held void in the Freeman v. Premier case were identical in substance with certain claims adjudicated in Freeman v. Altvater, No. 8962, and which claims now have fraudulently been reasserted in reissue letters patent 20,203. Wherefore it is alleged that for these reasons reissue letters patent 20,203 is void and Freeman is estopped to deny that said reissue letters patent 20,203 is not void; and it is further denied that this reissue has been substituted in the contract.

[fol. 47]

11.

On or about November 11, 1936 Benjamin W. Freeman, plaintiff herein, filed a disclaimer in the United States Patent Office purporting to be pursuant to Revised Statutes of the United States, Secs. 4917 and 4922, in which he disclaimed himself to be the inventor of the subjects matter set forth in claims 6, 7, 8, 10 to 17, inclusive, 62, 63 to 69, inclusive, 71 to 74, inclusive, 79, and 94 of his letters

patent 1,681,033, such claims being all the claims in suit in the case of Freeman v. Premier, save numbers 18, 70, and 81.

12.

That the contract upon which the present suit is based comprised a license to the defendants under original letters patent 1,681,033. By the voluntary disclaimer, and by the surrender of the said patent to obtain the reissues, the consideration upon which the contract was based was first emasculated and then utterly destroyed. Wherefore the original contract came to an end, and no injunction thereunder may continue, nor may any new injunction be issued.

13.

That reissue letters patent 20,203 is invalid and void for claiming as the invention of Freeman subjects matters held not to be his invention in Freeman v. Premier, and which also were disclaimed by him as aforesaid, and which were averred by him to be the same as other matter held void. Wherefore reissue letters patent 20,203 is fraudulent and invalid; and wherefore the defendants further say that this reissue has not been substituted in the contract.

[fol. 48]

14.

That reissue letters patent 20,203 is further void in that it asserts new matter and purports to cover inventions not a part of the original letters patent 1,681,033.

15.

That reissue letters patent 20,202 and 20,203 are each invalid and void because original letters patent 1,681,033 was not shown to be inoperative or invalid for any reason specified in Revised Statutes Sec. 4916; and specifically because there was not shown to be any error of the patentee Freeman arising from inadvertence, accident, or mistake, and without any fraudulent or deceptive intention.

16.

That reissue letters patent 20,202 and 20,203 are invalid and void for that they were not timely sought.

17.

That if said reissue letters patent, or either of them have been substituted in the contract, plaintiffs' Exhibit A, such reissue letters patent are and have been so restricted by the decision of Freeman v. Premier, the disclaimer, and the other acts of Freeman, that they cannot be construed with such breadth as to cover the structures accused herein.

18.

That in view of the fraudulent acts of the plaintiff Freeman in obtaining and perpetrating said reissue letters patent, he comes into this court of equity with unclean hands.

Further pleading by way of counterclaim, the defendants say:

[fol. 49]

19.

That the defendant herein, Western Supplies Company, has, in operating under the license contract, invested sums of money and built up a substantial business. In the manufacture of certain dies under the license contract, the defendants have always, since the formation of said contract and until the date of said reissues, paid royalties. The plaintiffs are desirous of continuing this line of manufacture as established and which comes within the narrow and restricted limits of the invention declared valid to the plaintiff Freeman in original letters patent 1,681,033, by the First Circuit Court of Appeals in the Freeman v. Premier case, and are willing to pay proper royalties thereon, if any valid letters patent now covers such.

20.

That by the wilful surrender of letters patent 1,681,033, by the unlawful reissues thereof, and by the voluntary disclaimer of subjects matter embraced in and forming the consideration for the said license contract, the plaintiffs herein, as defendants alleged and believe, have terminated and destroyed the license contract under which defendants herein have built up a business; and by so destroying such contract, plaintiffs have left the defendants without the

protection of the letters patent 1,681,033, and subject to additional litigation for infringement of the reissue letters patent, if they, or either of them, continue the business built up under said contract.

[fol. 50]

21.

That if the defendants herein are compelled, in order to continue such business, to accept a reformation of the license contract with only the substitution of the two reissue letters patent 20,202 and 20,203 for the original letters patent 1,681,033, reasserting all the terms and conditions of the said original contract, as is asserted by the plaintiff herein the defendants are required to do, defendants will then be compelled

(a) to acknowledge validity not only of the claims carried into the reissue letters patent and which are invalid for the reasons hereinbefore set forth, but also

(b) to acknowledge validity of the broader claims newly introduced into said reissue letters patent.

For defendants so to acknowledge validity of said reissues is to aid in the fraud against the public by their presence as a license under said reissue letters patent; and also is to render defendants subject to payment of unjust royalties on machines or dies not the invention of Freeman, both as to old claims rendered invalid by the Freeman v. Premier decision or disclaimed by Freeman, but carried over and wrongfully repromulgated in said reissue letters patent, and to claims newly added and of broader scope than claims in the original letters patent 1,681,033 and hence broader than the extent of the original waiver of contestability embraced in clause 18 of said license contract.

[fol. 51]

22.

If the license contract is not terminated, but subsists as embracing reissue letters patent 20,202 and 20,203 in place of original letters patent 1,681,033, defendants herein either must acknowledge validity of the wrongfully promulgated claims of the reissue letters patent, as set forth above; or to terminate and cancel the contract under the provisions of its clause 18 on the ground of a declaration of invalidity

in the case of Freeman v. Premier. If such cancellation be effected the defendants subject themselves to an infringement suit for manufacturing dies, the business of which was built up in good faith under said license contract.

23.

That in order to protect the business built up by the defendants under the contract, the same must be reformed on the basis of any now existing letters patent, if such exist, and after interpretation of such letters patent to determine the scope of the license and the amount of royalty to be paid thereunder.

24.

That the defendants herein, in said other suit entitled Freeman v. Altvater, No. 8962 in Equity, and referred to in paragraphs 5 and 6 of the original bill of complaint herein, stand under an injunction against manufacturing certain machines within the monopoly of the original letters patent 1,681,033 and thereby violating said contract. Defendants further say that since the Freeman v. Premier decision, the disclaimer, and the other acts of Freeman herein set forth, the monopoly of said letters patent 1,681,033 no longer exists, and that Freeman now has no valid claims covering said machines, and that their manufacture does not constitute a violation of any contract rights of the plaintiffs against which violations the defendants [fol. 52] were enjoined. Wherefore it is necessary to determine the present rights of the defendants under said injunction.

Wherefore the defendants, in addition to the prayers already set forth in the original answer hereto, do pray:

I.

That the license contract and letters patent 1,681,033, for which contract specific performance is herein sought, be interpreted in the light of the decision of Freeman v. Premier.

II.

That the license contract be interpreted by this Court to readjust the relationship between its parties in the light of the facts transpiring since it was entered into.

III.

That, specifically, the license contract in its original form with all additions and amendments thereto be declared terminated and at an end as of the date of the disclaimer, or the date of surrender of said original letters patent 1,681,033.

IV.

To declare void reissue letters patent 20,202 and 20,203 and to dismiss this bill as to them, but, if either is valid, then to interpret it or them into its or their proper scope in the light of the facts occurred.

V.

In the event that either or both reissues is held valid, then to direct the plaintiffs, or either of them, to grant to the defendants a license under them of a scope to permit their business to be continued to the extent it could operate under the original contract, and at a royalty commensurate with the protection afforded by the patents.

[fol. 53]

VI.

To declare that the injunction granted against violation of the original contract has terminated by the ending of said contract and, if said contract has been in any [—] continued and not terminated, then to define the limits of the injunction in the light of the facts occurred.

VII.

That the bill of complaint and the supplement thereto be dismissed because the plaintiffs come into equity with unclean hands.

VIII.

For any and all other relief as in equity shall be proper.

LAWRENCE C. KINGSLAND,
EDMUND C. ROGERS,
Solicitors and of Counsel for Defendants.

[fol. 54] (Motion of Plaintiffs to strike portions of Answer of Defendants to Supplement to Bill of Complaint, etc.)

(Filed November 29, 1937.)

Now come the plaintiffs and move the Court with reference to the Answer to Supplemental Bill of Complaint, as follows:

1. Plaintiff move to strike from the answer all matters which consist in denials of validity of the patents on which the contract in suit applies, and specifically:

(a) the last five words of clause 1 of the answer;

(b) the matter following the fourth word, line 6 of clause 4 of the answer;

(c) all of clauses 8, 9, 10 and 11.

(d) all of clauses 13, 14, 15 and 16

On The Ground that they do not consist in admission or denial of any facts stated in the supplemental bill, and that they do not constitute a defense which is good and [fol. 55] valid in law to the original bill taken with the supplement thereto.

2. Plaintiffs further move to dismiss the counterclaim forming part of the said answer On The Ground that it does not state facts sufficient to constitute a cause of action.

Respectfully submitted,

BENJAMIN W. FREEMAN and
THE LOUIS G. FREEMAN COMPANY,
Plaintiffs.

By BRUNINGA AND SUTHERLAND,
ALLEN & ALLEN,

Attorneys.

MA-jb

[fol. 56] (Order overruling Motion of Plaintiffs to strike portions of Answer of Defendants to Supplement to Bill of Complaint, etc.)

(Filed March 1, 1938.)

Plaintiff's Motion (1) to strike parts of the answer of defendants to Supplemental Bill of Complaint, and (2) to dismiss Counterclaim overruled.

CHARLES B. DAVIS,
United States District Judge.

[fol. 57] (Reply of Plaintiffs to Counterclaim of Defendants.)

(Filed March 17, 1938.)

Now Come the plaintiffs and reply to the counterclaim of the defendant, reserving to themselves all objections to the legal force and effect thereof and of each and every portion thereof, and for their reply state as follows:

1. In reply to Paragraph 19 of the counterclaim plaintiffs admit that defendant Western Supplies Company, although jointly with the defendant Altvater at all times, has been operating under the license contract in suit. Plaintiffs are not advised as to the sums of money alleged to have been invested by defendants, and hence deny that defendants, or either of them, have invested any money in operating under the license contract in suit. Plaintiffs admit that defendants have paid royalties under said license contract upon certain dies made and sold by them and [states] that such royalties are still being paid by defendants. Plaintiffs are not advised, save by the counterclaim, as to what defendants desire to do, and plain-[fol. 58] tiffs are not advised as to what defendants mean by "the narrow and restricted limits" of the Freeman invention, and hence deny such allegations. Plaintiffs state that U. S. patent No. 1,681,033 has been reissued, that if defendants purport to be licensees under said patent as reissued, it is their duty to pay royalties under said license contract to the plaintiffs, and that defendants are in fact licensees under said reissue patents, and are estopped to

assert that the patents under which they are licensed are invalid.

2. Plaintiffs replying to Paragraph 20 of the counterclaim deny that they wilfully surrendered Letters Patent No. 1,681,033, deny that the reissues thereof are unlawful, deny that the defendants have any right to assert that they are unlawful, deny that disclaimer was made by them except as part of proceedings for reissue of said Letters Patent, deny that matters forming part of the consideration of the license contract were disclaimed, deny that they have terminated and destroyed the said license contract, deny that they have left the defendants without protection of Letters Patent No. 1,681,033 or reissues of the same, deny that their acts have subjected defendants to additional litigation for infringement of said Letters Patent, and state that as licensees under said license contract, the defendants are estopped to plead as is done in Paragraph 20 of the counterclaim.

3. In reply to Paragraph 21 of the counterclaim plaintiffs deny that defendants were compelled to accept reformation of said license contract in order to continue their business. Plaintiffs allege that defendants accepted the substitution of reissue patents Nos. 20,202 and 20,203 for [fol. 59] the original patent No. 1,681,033 in said license contract. Plaintiffs deny that the reissue of patent No. 1,681,033 or any acts of plaintiffs in connection therewith have, or will, compel defendants to acknowledge the validity of any claim carried over into said reissue letters patent from the original said Letters Patent, or to acknowledge validity of broader claims in said reissue Letters Patent; and deny that acknowledgement of said reissue Letters Patent as valid will result in any fraud against the public or subject the defendants to payment of unjust royalties or anything whatever as to any claims whether disclaimed upon reissue, revised by reissue, or carried over from the original patent into the reissues. Deny that any wrongful act was done in said reissues, deny that any claim not within the scope of the monopoly originally intended to be procured by said patent No. 1,681,033 are to be found in said reissues, and deny that the original waiver of contestability in the said license contract is in any way modified by the facts set forth in

said Paragraph 21, and deny the existence of the contingency set up in said paragraph.

4. Replying to Paragraph 22 of the counterclaim plaintiffs deny that there is open to defendants the alternative procedures as alleged, or any other alternative, and state that defendants have accepted the reissue Letters Patent Nos. 20,202 and 20,203, in substitution for the original patent in their license contract. Plaintiffs deny that any right to terminate said license contract under Clause 18 thereof exists as alleged, and hence deny that defendants face the alternative alleged in the concluding sentence of Paragraph 22 of the counterclaim.

5. Plaintiffs deny the statements made in paragraph 23 of the counterclaim, and state that change in royalty or re-interpretation of patents is not a reformation of the contract herein but would amount to the writing of a wholly new contract, and further state that all licensees under the original patent No. 1,681,033 of plaintiffs which were in good standing at the date of the reissues have accepted the substitution of the reissues in said contract and without other change.

6. Plaintiffs admit as stated in Paragraph 24 of the counterclaim that defendants stand under an injunction in cause 8,962 in Equity which enjoins the manufacture of machines coming within the monopoly of U. S. Letters Patent No. 1,681,033 in violation of said license contract, but deny that the decision in Freeman vs. Premier the disclaimer, and other acts of Freeman result in the monopoly of Letters Patent No. 1,681,033 being no longer determinable from that document, deny that the patent monopoly granted to the plaintiff Freeman, under said letters patent has ceased to exist and state that it has merely been reformed by reissue to more accurately express the said monopoly, deny that there are no longer any claims of Freeman covering the machines which defendants are enjoined to make and state that whether there are such claims or are not such claims, in no way makes the injunction aforesaid indeterminate as to its scope, deny that should defendants violate the injunction, it would not constitute a violation of the contract rights of plaintiffs, and deny that there is any necessity of determining the present rights of the defendants under the said injunction in said cause.

[fol. 61] And for Further Replying:—

7. Plaintiffs state that insofar as concerns the matters set forth in Paragraph 24 of the counterclaim, that such matters can be presented only in said cause No. 8,962, and that such matters have in fact been presented in said cause to the Court of Appeals of the Eighth Judicial Circuit, and said Court has dismissed the motion of defendants for leave to present such matters as are set forth in the said Paragraph 24 of this Court in the said cause; wherefore this Court is without jurisdiction or right to consider such matters as set forth in Paragraph 24 of the counterclaim.

8. Plaintiffs say that there is no controversy—between the plaintiffs and the defendants as set forth in the counterclaim which is a justiciable controversy; wherefore defendants have no right to a declaratory judgment, which is the nature of said counterclaim.

9. Plaintiffs say that the controversy as to reformation of contract, the effect of grant of the reissues, the effect of the decision in the Freeman vs. Premier cause, and the effect of the disclaimer, as set forth in the counterclaim exclusive of Paragraph 24 thereof, which relates only to cause 8,962 as therein set forth, is *res adjudicata* against the defendants, by reason of the decision of the United States District Court for the Southern District of Ohio, Western Division, in cause No. 1,015, in Equity, as set forth in a decree of that Court dismissing the bill of complaint for declaratory judgment of the defendants against the plaintiffs, dated September 22, 1937, a copy of which and of the pleadings and record of such case the plaintiffs make profert to this Court.

[fol. 62] 10. Plaintiffs say that insofar as the matters set up in the counterclaim of the defendants are ones bearing upon the issues made up by the Bill, Supplemental Bill, and Answer to the Bill and Supplemental Bill in this cause, are concerned, the defendants will have their day in Court, and hence there is no controversy requiring judicial determination in a declaratory judgment proceeding as to such issues.

11. Plaintiffs state that insofar as concerns reformation of contract between the parties as alleged to be required

of this Court in the counterclaim, pursuant to the facts set forth in said counterclaim, the defendants have not set forth, nor is it true that there is any understanding or ever was any understanding between the parties as to which reformation in equity of said license contract could be based, all understandings and agreements of the parties having been incorporated in said license contract when the same was originally entered into.

12. Plaintiffs say that the defendants come into this Court with unclean hands in their said counterclaim, because in Paragraph 24 thereof they set forth matters with reference to cause 8,962 which matters were presented by defendants to the Court of Appeals of the Eighth Judicial Circuit, in the said cause, and the right to present such matters to this Court was denied to defendants, and yet without advising this Court of the said facts, the defendants seek by subterfuge to obtain the jurisdiction of this Court in the very matter as to which the Court of Appeals upon due hearing [was] declined to permit them a right to come before this Court, [wherefor] the counterclaim should be dismissed.

[fol. 63] 13. Plaintiffs say that the counterclaim is without force and effect and should be dismissed because it merely seeks to obtain advice of this Court as to a course of action which defendants according to the statements in said counterclaim may take or not as they see fit, so that the relief prayed for is merely advisory in nature, wherefore no right to declaratory judgment is set forth.

14. Plaintiffs state that defendants have paid royalties under the license contract in suit to the plaintiffs as required therein without any change, following the tender of the reissues of patent No. 1,861,033 as substitutes for said patent in said license contract, and that plaintiffs have no cause of action against the defendants upon said reissue patents, under which defendants are licensed, but only under the said license contract, and that the principal action herein involves those matters which are in controversy between the parties hereto under the said contract except as the rights of the parties under said contract are res adjudicata between them in said cause 8,962, wherefore there being no justiciable controversy between the parties except that involved in the main action herewith, there is

no unlitigated cause of action upon which this Court has jurisdiction to make declaratory findings, as prayed for in the said counterclaim of the defendants.

Wherefore the plaintiffs pray that the counterclaim be dismissed without findings by this Court.

THE LOUIS G. FREEMAN COMPANY and
BENJAMIN W. FREEMAN,

By [BRUNINGS] AND SUTHERLAND,
ALLEN & ALLEN,

Their Attorneys.

Service of the foregoing "Reply to Counterclaim of Defendant" and receipt of a copy, is hereby acknowledged this 17th day of March, 1938.

LAWRENCE C. KINGSLAND,
Attorney for Defendants.

[fol. 64] (Motion of Defendants for Judgment on Pleadings.)

(Filed June 19, 1938.)

Defendants hereby move for judgment on the pleadings in the above case that the Freeman patent monopoly has terminated, ending the agreement between the parties hereto for the following reasons, based upon Prayers I, III, IV, VI, VII, and VIII in the Answer to the Supplement to the Bill of Complaint, hereinafter designated Supplement Answer:

1.

That, as set forth in Paragraph 11 of the Supplement Answer, Freeman, on or about November 11, 1936, disclaimed [twent-three] claims of his patent 1,681,033; but in so doing he retained in said patent other claims to the same or equivalent or indistinguishable subjects matter; wherefore, the entire patent was invalid, as set forth in Paragraph 21, for improper disclaimer, under the rule enunciated by the Supreme Court May 22, 1939 in *Maytag Co. v. Hurley Machine Corp.*, 41 USPQ 556, as set forth in Paragraphs 12 and 24 of the Supplement Answer.

[fol. 65] Specifically, claims 1-5, 9, 19, 24-34, 43, 45, 46-49, 52, 54-61, 75, 82, 86, 87, 90, 91, all inclusive, are for subjects matter indistinguishable from those of the claims disclaimed.

2.

That, as set forth in Paragraphs 4, 12, 13, 20, 21 and 24 of the Supplement Answer, the reissue patents are invalid, because they purport to be based upon an original patent that had no existence at the time the reissues were granted, the same having been invalidated in whole for reasons above stated.

That, as set forth in Paragraphs 4, 9, 10, 12, 13, 20, 21, and 24, the reissues are also invalid because they reassert claims that are identical with or equivalent to claims that were declared invalid by the First Circuit Court of Appeals in the Premier case, or which were disclaimed by Freeman. f

Specifically, claims 2-5, 19, 27, 34, 46, 61, 82, and 87 are carried wrongfully over into the reissues, and render the same invalid for reasons noted.

3.

That, as set forth in Paragraphs 4, 14, 15, and 16 of the Supplement Answer, the reissue letters patent, both of them, are invalid for asserting new matter not a part of the original letters patent; and for not having been timely sought.

LAWRENCE [P.] KINGSLAND,
EDMUND ROGERS,
Attorneys for Defendants.

ESTILL E. EZELL,
Of Counsel.

Receipt is acknowledged this 19 day of June, 1939.

JOHN H. SUTHERLAND,
[Attorneys] for Plaintiffs.

St. Louis, Missouri, June 19, 1939.

[fol. 66] Plaintiffs' Answer to Defendants' Interrogatories.
(Filed December 21, 1939.)

Now comes the plaintiffs and make the following answer to interrogatories propounded by the defendants on or about the 20th day of February, 1936.

In answer to Interrogatories 8 and 9, the charge is that while operating under a license pursuant to paragraphs 1, 2, 4, 6, 10, 11, 16 and 18 of the license contract, Exhibit A, the defendants failed to live up to paragraph 2 with regard to territory insofar as concerns the flat bed dies with mask entitled clamp gauge dies, or elevated gauge dies; failed to pay royalty pursuant to clause 4 on the said dies; failed to mark the dies pursuant to Clause 6; failed to keep books and records in accordance with Clause 10; failed to render accounts as provided for by Clause 11, has taken the position inconsistent with Clause 16 and inconsistent with Clause 18 all of the contract attached and designated as Exhibit A.

[fol. 67] As set forth in answer to interrogatories 12 and 13, plaintiff contends that the parties defendant are jointly and severally liable.

In answer to Interrogatories 10 and 11, the answer is *no*.

In answer to Interrogatories 12 and 13, the contract in suit is a joint contract with Western Supplies Co., a corporation and Arthur W. Altvater, principal owner and Manager, and both parties are jointly and severally liable for infractions to the contract, and furthermore, Arthur W. Altvater is principal owner of and controls the operations of Western Supplies Co. Wherefore the acts specified in answer to Interrogatories 8 and 9 apply equally to both defendants.

In answer to Interrogatory 14, the answers of the defendants to plaintiffs' interrogatories gives specific examples of the types of dies charged to be infringements and places where sold.

In answer to Interrogatory 15, so far as plaintiffs understand defendants' designations, the die, plaintiffs' exhibit 5, is an elevated gauge die, and the die, plaintiffs' exhibit 1, is a clamp gauge die.

In answer to Interrogatory 16, there is pending an accounting proceeding in connection with the original suit on the contract, Exhibit A, and either in that suit or in the present suit the plaintiffs are presenting the violations of said contract of which they are advised. Depending upon rulings of the Master, Mr. Elliott, who is conducting the said accounting, plaintiffs cannot tell what devices the Master will ultimately rule are not proper for [fol. 68] him to consider in said accounting. Wherefore plaintiffs cannot make any statement but that they have presented all violations of their contract with the defendants, of which they have knowledge, in one or the other proceedings.

In answer to Interrogatory 17, plaintiffs state that in their supplemental bill filed in this cause, they have set forth the claims upon which they propose to rely.

In answer to Interrogatory 18, the plaintiffs state that where an elevated or clamp gauge die has a mask which partially surrounds the work, sufficiently to so gauge the same, by reason of the correspondence of the configuration of the edges of the mask, with the configuration of some parts of the design of the work piece, as to locate the work in all directions in the plane of the die, and serves to hold down the work at points located beyond a line only on one side of the cutting edges of the die, then such a clamp gauge die or elevated gauge die is charged to infringe. The plaintiffs cannot answer the questions categorically as stated in the interrogatory, but have endeavored to state their position frankly on the subject of the inquiry.

In answer to Interrogatory 19, it is submitted that the answer to Interrogatory 18 adequately states the plaintiffs' position.

The answer to Interrogatory 20 is *yes*, if means are provided to accomplish the positioning of the clamping member in the two engagements.

[fol. 69] In answer to Interrogatories 22, 23, 24 and 25 plaintiffs say that they are gathering the information requested in connection with the same and will supply the information as promptly as they can.

The plaintiffs say that defendants' counsel participated

in or was fully apprised of the proceedings in the cause of Freeman vs. Premier Machine Co., in which cause copies of all then existing licenses were filed in Court, and hence is apprised of the licenses issued under U. S. Letters Patent No. 1,681,033, which except for two of the licenses which have been cancelled for cause, are still in existence, but by consent of the parties have been modified to apply under re-issue letters patents 20,202 and 20,203, same being reissues of patent No. 1,681,033.

As reason for delay in supplying this last information, plaintiffs say that the interrogatories to which they are now replying were filed Feb. 20, 1936, their objections in part were filed February 28, 1936, and plaintiffs have just been advised that the objections made have been overruled by the Court.

Plaintiffs have referred to the questions which they have answered as if they were interrogatories, although the original paper filed by the defendants was largely addressed to matters involving not the defendants' case, which would be proper for interrogatories, but the plain-[fol. 70] tiffs' case which would have called for a Bill of Particulars.

BENJAMIN W. FREEMAN and
THE LOUIS G. FREEMAN COMPANY.

By ALLEN & ALLEN.

State of Ohio }
County of Hamilton. } ss.

Benjamin W. Freeman, both as an individual and as President of The Louis G. Freeman Company, being duly sworn, deposes and says that the above answers to Defendants' Interrogatories are true to the best of his knowledge and belief.

BENJAMIN W. FREEMAN.

Sworn to before me this 19th day of December, 1939.

ADA H. PURDON,
Notary Public.

(Seal)
MA•P

[fol. 71] (Amendment to Answers of Defendants.)

(Filed February 7, 1940.)

The defendants hereby amend their answers heretofore in the present case by adding thereto the following:

That the plaintiffs come into this Court with unclean hands because of the fact that they have, through the medium of license contracts, attempted to make and have made for themselves monopolies in unpatented devices; and specifically that the plaintiffs have employed the patents in suit contrary to law to establish and maintain for themselves severally a monopoly in unpatented dies when used in the industry in connection with certain machines or pursuant to a certain method. To this end the plaintiffs license their patented machines exclusively for use with unpatented dies both from themselves or specified manufacturers, and no others; and further the plaintiffs license certain persons to make dies for use with the licensed machines only on consideration that they make such dies, which in themselves are unpatented, for no others.

[fol. 72] Defendants further charge, therefore, that this suit is brought as a part of a plan or scheme to create such an unlawful monopoly in the sale of unpatented dies and to prevent the rightful users of the machines from buying unpatented dies from others and in particular from this defendant.

LAWRENCE C. KINGSLAND,
EDMUND ROGERS,

Attorneys for Defendants.

St. Louis, Missouri
February 7, 1940

[fol. 73] Defendants' Motion to Admit Further Evidence.
(Filed May 15, 1940.)

Plaintiffs were requested by defendants on the record at the trial hereof to supply copies of all different types of lease or license contracts subsisting and based upon the original or reissued patents. Defendants understood from the statements of plaintiffs' counsel on the record that such

would be supplied for introduction into the record after close of testimony.

Pursuant to that request, counsel for defendants had correspondence with counsel for plaintiffs, copies of which are annexed hereto and designated Exhibits X1 (February 17, 1940), X2 (contract A attached to Exhibit X1), X3 (contract A1 attached to Exhibit X1), X4 (contract B attached to Exhibit X1), X5 (February 23, 1940), X6 (February 26, 1940), and X7 (February 29, 1940). The last letter, Exhibit X7, has never been answered by counsel for plaintiffs.

Defendants have just learned that plaintiffs are attempting now to recall a number of contracts of the type attached hereto as Exhibit X8, and that at least up to the present [fol. 74] time such licenses have been outstanding. Wherefore, plaintiffs, by the contracts and by their actions relating thereto, have come into equity with unclean hands and have created an illegal monopoly beyond that permitted by the patent laws, and to the great damage of the defendants.

Wherefore, defendants pray this Court for leave to reopen the receiving of evidence in this Court, so that they may prove the facts above alleged and the results thereof.

And to that end defendants request this Court to direct the plaintiffs, Benjamin W. Freeman and The Louis G. Freeman Company, by Benjamin W. Freeman, or any one who may with authority do the same for said plaintiffs, to supply information contained in the annexed interrogatories, and to perform any other acts as shall seem to this Court proper.

ARTHUR W. ALTVATER,
WESTERN SUPPLIES COMPANY,

By L. C. KINGSLAND,
E. C. ROGERS,
Attorneys.

St. Louis, Missouri
May 15, 1940.

Service of two copies of this Motion made by placing said copies in the mail, postage prepaid, addressed to Messrs. Bruninga & Sutherland, 1004 Market Street, St. Louis, Missouri, attorneys for plaintiffs.

MYRTLE H. OECHSLE.

[fol. 75] Defendants' Exhibit X1.

Feb. 17, 1940

Mr. Lawrence C. Kingsland
705 Olive St.,
St. Louis, Mo.

Dear Sir:

We have gone over with Miss Gibbons the matter of lease contracts in connection with cut-out machines, and have the following statement to make:

The old forms of license of which Ex. 14 in the original record is a copy, were issued before the Freeman patent was granted. When the patent was granted lease contracts were changed to read like the enclosed, which we have marked Forms A and A-1 attached. Since the reissue patents, the form used is as per the attached, marked Form B.

We trust that the above will provide the information which you request, and we are attaching a copy of this letter so that the original can be filed in the case.

Yours very truly,

MARSTON ALLEN.

MA*P
Encl.

[fol. 76] Defendants' Exhibit X2.

Lease Contract

The undersigned hereby requests of The Louis G. Freeman Company, the delivery of one Model-C Cut-Out Machine No. and leases said machine for use only at lessee's factory at It is understood

and agreed by the undersigned lessee, that this lease to it of said machine does not carry with it a license to make or otherwise obtain anvils, dies, and/or masks covered by U. S. Letters Patent No. 1,681,033 for use with said machine or for any other purpose unless the same are purchased from The Louis G. Freeman Company or others authorized under the said patent to supply same for said machine.

The lessee agrees to pay herewith installation fee of
Twenty-five \$25.00

~~One Hundred Dollars (\$100.00)~~ net, and thereafter a rental

Four \$4.00

of ~~Eight Dollars (\$8.00)~~ per month from date of shipment of said machine and in case of return of said machine agrees to pay a further sum of Fifty Dollars (\$50.00). Lessee agrees to keep said machine in working order, with insurance and taxes paid during term of this lease. Said machine remains the property of The Louis G. Freeman Company, whose agents may examine and inspect same at all times, and the lessee agrees that it will not in any way alter, add to, or adapt the said machine except as authorized in writing by The Louis G. Freeman Company.

This lease is personal and non-transferable and is terminable in case of breach of above conditions or if the lessee infringes upon said Letters Patent.

Executed at Cincinnati, Ohio, this day of,
A. D. 19....

..... Lessee,

By

Accepted:

THE LOUIS G. FREEMAN COMPANY, Lessor,

By

[fol. 77]

Defendants' Exhibit X3.

Lease Contract

The undersigned hereby requests of The Louis G. Freeman Company, the delivery of one Model-C Cut-Out Machine No. and leases said machine for use only at lessee's factory at It is understood and agreed by the undersigned lessee, that this lease to it of said machine does not carry with it a license to make or otherwise obtain anvils, dies, and/or masks covered by U. S. Letters Patent No. 1,681,033 for use with said machine or for any other purpose unless the same are purchased from the Louis G. Freeman Company or others authorized under the said patent to supply same for said machine.

The lessee agrees to pay herewith Four Hundred Dollars (\$400.00) net, as a total rental for use of said machine during the life of said patent and subsequently issued patents covering the machine, and/or its operative parts and equipment, and agrees to keep said machine in working order, with insurance and taxes paid during term of this lease. Said machine remains the property of the Louis G. Freeman Company, whose agents may examine and inspect same at all times, and the lessee agrees that it will not in any way alter, add to, or adapt the said machine except as authorized in writing by the Louis G. Freeman Company.

This lease is personal and non-transferable and is terminable in case of breach of above conditions or if the lessee infringes upon said letters patent.

Executed at Cincinnati, Ohio, this day of,
A. D. 19....

..... Lessee,

By

Accepted:

THE LOUIS G. FREEMAN COMPANY, Lessor,

By

[fol. 78]

Defendants' Exhibit X4.

Lease Contract

The undersigned hereby leases from The Louis G. Freeman Company, Model Cut-Out Machine No. for use only at lessee's factory at It is understood and agreed by the undersigned lessee, that this lease to it of said machine does not carry with it a license to rebuild or re-equip the same, nor, specifically to make or otherwise obtain dies, and/or masks, covered by U. S. Reissue Letters Patent No. 20,202 and 20,203 for use with said machine or for any other purpose, unless the same are purchased from The Louis G. Freeman Company or others authorized under the said Patents to supply same for said machine.

The lessee agrees to pay herewith Initial Fee of, and thereafter a rental of per month from date lessor ships said machine to the lessee until the date same is reshipped by lessee to lessor, and upon termination of this lease, agrees to pay a further sum of Lessee agrees to keep said machine in working order, with insurance (to its full value of) and taxes paid during the term of this lease. Said machine remains the property of The Louis G. Freeman Company, whose agents may examine and inspect same at all times, as well as all dies and masks for use therewith, and the lessee agrees that it will not in any way alter, add to, or adapt the said machine except as authorized in writing by The Louis G. Freeman Company.

This lease shall extend for the period of one year, and for successive terms of one year, unless the lessee at least thirty days before the termination of any year gives notice in writing to lessor of termination of the lease. In case of termination of this lease for any cause the lessee shall promptly deliver the said machine to a responsible carrier consigned to lessor's factory, freight prepaid. Lessee may terminate this lease on 60 days written notice to lessor at any time. Lessor may terminate this lease for breach of conditions or infringement by lessee upon said letters patent, upon 30 days written notice to lessee, at any time. This lease is personal and non-transferable.

Executed at Cincinnati, Ohio, this day of,
A. D. 19....

..... Lessee,

By

Accepted:

THE LOUIS G. FREEMAN COMPANY, Lessor,

By

[fol. 79] Defendants' Exhibit X5.

February 23, 1940

Messrs. Allen & Allen
Attention Marsten Allen, Esq.
706 Gwynne Building
Cincinnati, Ohio.

Dear Mr. Allen:

Re: Freeman v. Altvater—No. 11,629.

Your letter of February 17, 1940 with copies of license and contracts attached has been received and will be entered into the case in accordance with the understanding at the trial.

We should like to have the record perfectly definite that all of the old contracts, such as the one to the Brown Shoe Co., have been withdrawn and are no longer in existence. Specifically, we should like also to have your statement that the agreement for machine No. 18 is no longer in existence.

While your letter of February 17th perhaps was intended to imply that all of these old contracts are non-existent, we should like to have the matter settled without ambiguity, and I think you will agree that it would be better to do so.

We hope that you have recovered from your indisposition at the time of the trial.

Very truly yours,

ECR:R

[fol. 80] Defendants' Exhibit X6.

Feb. 26, 1940.

Mr. Lawrence C. Kingsland,
705 Olive St.,
St. Louis, Mo.

Dear Mr. Kingsland:

Re: Freeman vs. Altvater No. 11,629

I have yours of February 23, in re the Freeman contracts. I gathered that your desire for information was related to the Freeman patent and his contract activity with relation thereto. If so, I do not see of what importance it is what Freeman did before he got his patent.

It would be necessary to try to trace machines back some fifteen or sixteen years and find out if they were still in existence to answer your question as to whether any of the old leases is [till] in operation.

I believe therefore that Freeman should not be called upon to make any such investigation. I presume that you, representing Altvater, could find out about some machine at the Brown Shoe Co.

Yours very truly,

MARSTON ALLEN.

MA•P

[fol. 81] Defendants' Exhibit X7.

February 29, 1940

Messrs. Allen & Allen
Attention Marsten Allen, Esq.
706 Gwynne Building
Cincinnati, Ohio.

Dear Mr. Allen:

Re: Freeman v. Altvater—No. 11,629.

In response to your letter of February 26, 1940, I would suggest that it seems there has been a misunderstanding in your mind about what we requested in court.

I think we have a full right to know whether any of the original type of contract remain in existence, because it was not cancelled by Freeman. Freeman is unquestionably in a position wherein he peculiarly would have the information.

The evidence that we have indicates that the Brown Shoe Company contract, mentioned in our former letter, does remain in existence. As we attempted to make perfectly clear during the trial, you were being asked to supply this information for the purpose of avoiding the necessity of bringing in witnesses from all over the country who might testify. It was certainly our understanding that you agreed to give the information and we, therefore, are compelled to insist upon it.

Specifically, and without waiving any other rights, we should like to know about the Brown Shoe Company contract.

[fol. 82] We may add that what Freeman did before he got his patent becomes important if the relationship was continued after the patent came out.

May we then have a statement for the record on whether the Brown Shoe Company contract mentioned still is in existence or not; and if not, whether any other similar contract is now in existence; and, in any event, a statement that such contracts were at one time used by Freeman and Freeman cannot now say that they are not still in existence, because Freeman has not undertaken to see that they were all cancelled.

Very truly yours,

ECR:R

[fol. 83] Defendants' Exhibit X8.

Order, Lease-Contract and License.

The undersigned hereby orders of The Louis G. Freeman Company, one Freeman Cut Out Machine No. 18, and leases said machine for use only at lessee's factory at Homestake Factory, St. Louis, this lease constituting a license from The Louis G. Freeman Co. under its inventions, and any patents issued thereon.

As a rental consideration, lessee agrees to pay herewith Four Hundred Dollars (\$400.00) net, a total rental for the life of any patent or patents covering said machine, and as continuing consideration, agrees to buy all dies and parts for use in the operation of said machine, of The Louis G. Freeman Co. at their regular scheduled prices, the undersigned hereby agreeing to keep said machine in working order, with insurance and taxes paid during the term of this lease. The said machine remains the property of The Louis G. Freeman Co., whose agents may examine and inspect same at all times.

Executed at Cincinnati, Ohio, this 8th day of December, A. D. 1923.

BROWN SHOE COMPANY INC. Lessee,
By E. R. McCARTHY, Vice-Pres.

Accepted:

THE LOUIS G. FREEMAN COMPANY, Lessor,
By BENJ. W. FREEMAN, Tres.

[fol. 84] (Interrogatories of Defendants re Machine Licenses propounded to Plaintiffs.)

(Filed May 15, 1940.)

Defendants propound the following interrogatories to be answered under oath by Benjamin W. Freeman and The Louis G. Freeman Company, or by anyone authorized to act for them:

1.

(a) State whether or not Exhibits A1 to A23, inclusive, and X2, X3, X4 and X8 represent all variations of license or lease agreements relative to any machine or dies purporting to be made in accordance with any claim of patent No. 1,681,033, or reissue patents Nos. 20,202 and 20,203.

(b) If the answer to (a) is negative, supply a copy of each additional variety of such agreements.

2.

(a) With respect to all machines ever leased or licensed under the Freeman patent 1,681,033 or reissue patents

20,202 and 20,203, specify by reference to exhibits in this case or exhibits supplied by plaintiffs, under what license [fol. 85] or lease agreement or agreements each such machine has ever been licensed or leased, identifying each licensee or lessee; state when such licenses or leases were made, and when terminated, if they have been terminated.

(b) If termination of such leases or licenses was effected by any writing, supply copies of every such writing.

3.

(a) State whether or not any efforts were ever made to cancel, terminate or modify any agreements relative to machines made or leased or licensed under Freeman patent 1,681,033 or reissue patents 20,202 or 20,203 with International Shoe Company, Brown Shoe Company, or Johnson-Stephens-Shinkle Sloe Company.

(b) If the answer to (a) is in the positive, state the dates of all such efforts and who initiated the same; if these efforts involved any correspondence, supply copies of all such correspondence; and, if the efforts were conducted orally, give the substance of all requests or demands made by plaintiffs, or either of them, and the substance of any and all responses thereto in chronological order and state the results thereof.

(c) Give the same information requested in (a) and (b) relative to any companies other than the three mentioned.

ARTHUR W. ALTVATER,
WESTERN SUPPLIES COMPANY,
By L. C. KINGSLAND,
E. C. ROGERS,

Attorneys.

St. Louis, Missouri, May 15, 1940.

Service of two copies of these Interrogatories made by placing said copies in the mail, postage prepaid, addressed to Messrs. Bruninga & Sutherland, 1004 Market Street, St. Louis, Missouri, attorneys for plaintiffs.

MYRTLE H. OECHSLE.

[fol. 86] (Memorandum for Clerk relating to overruling of Motion of Defendants to admit further evidence, etc.)

(Filed July 1, 1940.)

Defendants' Motion to Admit Further Evidence overruled without prejudice in view of Plaintiffs' agreement to answer Interrogatories 1 and 3 (a) and (b) without waiving its objection to the relevance and materiality of such evidence. Plaintiff allowed 15 days within which to answer Interrogatories 1 and 3 (a) and (b); within 15 days after such answers are filed Defendant may apply for an order requiring more complete answers and plaintiff may apply for leave to make a counter showing.

JOHN H. SUTHERLAND,
Attorney for Plaintiff.

(Copy 7/1/40-j.)

[fol. 87] Answer to Interrogatories by B. W. Freeman
Upon Order Dated July 1, 1940.

(Filed July 18, 1940.)

Now come the plaintiffs and make the following answers to interrogatories propounded by the defendants on or about May 16, 1940, on the basis set forth in the Court Order of July 1, 1940.

1 (a). In the record of this cause, page 95, Miss Mary Gibbons testified that all of the license contracts under reissue patents Nos. 20,202 and 20,203, had been put in evidence by her, together with any modifications thereof. These are Exhibits A1 to A23.

As to Exhibits X2, X3, X4, these forms are the outstanding leases, whereas Ex. X8 and a like form (copy attached) were long ago modified by the action of the parties.

1 (b). Exhibit 14 in the original cause No. 8962, between the parties, copy of which is hereto attached [fol. 88] as Ex. X9, is the other form referred to. Leases the same or like this form or Exhibit X8, are held by the Brown Shoe Company, The International Shoe Co., and The Johnson [Stevens] Shinkle Co. Also out-

standing is a form like Exhibit X10 hereto attached. There are no other varieties of forms so far as affiant can recall.

3 (a) B. W. Freeman lately has endeavored to get the three companies last named above to accept as a substitute lease agreement a form like Exhibit X10.

3 (b). The circumstances explaining the last answer above are as follows: In the years 1923 and 1924, and 1925, at which time B. W. Freeman had an application for patent only, he leased to the three companies last above named, certain cut-out machines using the form like Exhibit X9, and Exhibit X8. In no case was the condition in said lease form as to purchase of dies for use with the machines enforced by said B. W. Freeman or respected in any way by either of the said three companies, who never purchased any dies from The Louis G. Freeman Co., for use on said machines or otherwise, since the date of the said lease agreements, so far as affiant can determine from the books of said company.

Upon the return of Mr. Marston Allen from the trial of the present cause in February 1940, he inquired of B. W. Freeman whether or not machines were in existence as to which the said old leases like Exhibit X8 had been issued, to which affiant replied that he did not know. [fol. 89] Upon advice of said Marston Allen, the said B. W. Freeman did thereupon, call on all three concerns noted and presented to them copies of lease contracts in accordance with the form, Exhibit X10, and asked them to accept the same in place of the old leases, as stating the actual relations long in force between the parties.

In the case of each one, affiant believes that the representatives approached by him communicated with the defendants in this cause or their counsel, and refused to accept the modified form of license contract, or else stated that they would communicate with him later, and did not do so. The calls by B. W. Freeman were made on May 8th and 9th, 1940.

With regard to the Brown Shoe Co., the officer approached stated at first that the new leases seemed satisfactory but that they must go through the regular routine. However, he called the next day over the telephone and

flatly refused to accept the substitute leases, stating he would stand by because of pending litigation between affiant, B. W. Freeman and Altvater, but he declined to confirm this by letter, and returned the substitute forms to B. W. Freeman in an envelope with no letter of enclosure whatever. Said Freeman heard nothing from the other companies.

Thereupon said B. W. Freeman did write the letters copies of which are hereto attached as Exhibits X11, X12 and X13. Otherwise the matter was conducted orally.

B. W. Freeman says that by the conduct of the parties over a period of sixteen years, if there had ever [fol. 90] been any original intent of the parties that all dies for the leased machines should be purchased from The Louis G. Freeman Co., this aspect of the said Exhibits X8 or X9 lease agreement, was voided and that he has never considered it as binding, and has never sold any dies for said machines to the shoe companies named, and that by their conduct in buying all of their dies elsewhere, the said companies indicated that they too did not consider same as binding. Furthermore, there may be leased machines that have been sold or destroyed as far as affiant knows.

B. W. Freeman further says that he believes it to have been his duty to clear up any matters with regard to contracts outstanding on his leased machines, to make them in words, as well as in fact, conform to the law as at present administered by the Courts, and that it was in conformance with this idea of his duty that he approached the shoe companies above named.

**BENJAMIN W. FREEMAN and
THE LOUIS G. FREEMAN COMPANY.**

**By ALLEN & ALLEN,
Attorneys,
706 Gwynne Bldg.,
Cincinnati, Ohio.**

State of Ohio, }
 County of Hamilton. } ss.

Benjamin W. Freeman, both as an individual and as President of The Louis G. Freeman Company, being duly sworn, deposes and says that the above answers to Defendants' Interrogatories are true to the best of his knowledge and belief.

BENJAMIN W. FREEMAN.

Sworn to before me and subscribed in my presence this 17th day of July, 1940.

ADA H. PURDON,
 Notary Public.

MA•P

[fol. 91]

Exhibit No. X-9.

U. S. Dist. Ct. Ea. Div. Ea. Ju. Dist. of Mo.

No. 8962 Equity.

Freeman et al.

v.

Altvater, et al.

Defts. Exhibit 14.

Order, Lease-Contract and License.

The undersigned hereby orders of The Louis G. Freeman Company, one Freeman Cut Out Machine No. 40, and leases said machine for use only at lessee's factory at 12th & No. Market Sts. St. Louis, Mo. this lease constituting a license from The Louis G. Freeman Co. under the inventions, and any patents issued thereon.

As a rental consideration, lessee agrees to pay herewith Four Hundred Dollars (\$400.00) net, a total rental for the life of any patent or patents covering said machine, and as continuing consideration, agrees to buy all cutting anvils and parts for use in the operation of said machine, of The Louis G. Freeman Co. at their regular scheduled prices, the undersigned hereby agreeing to keep said machine in working order, with insurance and taxes paid during the term of this lease. The said machine remains

the property of The Louis G. Freeman Co., whose agents may examine and inspect same at all times.

Executed at Cincinnati, Ohio, this Second day of February, A. D. 1924.

INTERNATIONAL SHOE CO., Lessee.
By H. WATKINS, V. P.

Accepted:

THE LOUIS G. FREEMAN COMPANY, Lessor.
By BENJ. W. FREEMAN, Tres.

[fol. 92]

Exhibit X-10.

Lease Contract.

The undersigned leases from The Louis G. Freeman Company, Model.....Cut-Out Machine No..... for use only at lessee's factory at..... the lease constituting a license from The Louis G. Freeman Company under its inventions and any patents thereon, including United States Reissue Patents No. 20,202 and 20,203 granted to B. W. Freeman.

It is understood and agreed by the undersigned lessee, that this lease to it of said machine does not carry with it a license to rebuild or re-equip the same, nor, specifically to make or otherwise obtain dies, and/or masks, covered by U. S. Reissue Letters Patent No. 20,202 and 20,203 for use with said machine or for any other purpose, unless the same are purchased from The Louis G. Freeman Company or others authorized under the said Patents to supply same for said machine.

As a total rental for use of said machine during life of said Patents, lessee has paid to The Louis G. Freeman Company, the sum of.....net, and agrees to keep said machine in working order with insurance and taxes paid during the term of this lease. The said machine remains the property of The Louis G. Freeman Company, whose agents may examine and inspect same at all times, and the lessee agrees that it will not in

any way alter, add to, or adapt said machine except as authorized in writing by The Louis G. Freeman Company.

This lease supersedes former lease issued on the above numbered machine.

Executed at Cincinnati, Ohio, this.....
day of....., A. D. 19.....

....., Lessee,

By.....

Accepted:

THE LOUIS G. FREEMAN COMPANY, Lessor,

By.....

[fol. 93]

Exhibit X-11.

May 23, 1940

Registered

Johnson, Stephens & Shinkle Shoe Co.,
4242 Laclede Avenue,
St. Louis, Mo.

Gentlemen:

We have not heard from you since we submitted certain leases signed by us to take the place of leases issued to you many years ago covering Cut Out Machines Nos. 6, 19, 21, 92, 93, 113, 206, and 222.

The leases which you have for machines Nos. 6, 19, 21, 92, 93, 113, 206, and 222 dated November 14, 1923, December 8, 1923, December 15, 1923, June 20, 1924, June 20, 1924, November 17, 1924, June 4, 1925 and January 19, 1925, contain words relative to purchase by your company from the Louis G. Freeman Company of certain items on which we expected to get patents. This aspect of the leases has never been mentioned between us in sixteen years, has never been respected by you or enforced by us. You have not purchased any dies from us for these machines. We never raised any issue in this regard and never in-

tend to, and advise you that the old leases if you wish to retain them should read with the matter above referred to deleted, as far as we are concerned.

However, we trust that you will see fit to sign and return the substitute leases which we left with you.

Very truly yours,

THE LOUIS G. FREEMAN COMPANY,
BENJ. W. FREEMAN.

BWF/bw

[fol. 94]

Exhibit No. X-12.

May 22, 1940

Registered

Brown Shoe Company,
Washington Avenue,
St. Louis, Mo.

Attention: Mr. E. R. McCarthy.

Gentlemen:

We received your envelope dated May 9th by the St. Louis Post Office, with no letter of enclosure, and containing the revised leases which we executed and delivered to you by hand.

Your company had at one time Cut-Out machines Nos. 18, 34 and 71 which you obtained on leases bearing the said numbers dated December 8, 1923, January 9, 1924 and May 28, 1924. Whether you still have these machines we are not advised.

However, the said leases contain words relative to purchase by your company from the Louis G. Freeman Company of certain listed items which we expected to get patents on. This aspect of the leases has never been mentioned between us in sixteen years, has never been respected by you or enforced by us and you have never bought any dies for these machines from us. We never raised any issue in this regard, and never intend to, and advise you that the leases which you apparently wish to

retain should read with the matter above referred to deleted, as far as we are concerned.

Very truly yours,

THE LOUIS G. FREEMAN COMPANY,
BENJ. W. FREEMAN.

BWF/bw

[fol. 95]

Exhibit X-13.

May 23, 1940

Registered
International Shoe Co.,
St. Louis, Mo.

Gentlemen:

We have not heard from you since we submitted leases signed by us to take the place of leases issued to you many years ago covering Cut Out Machines Nos. 26, 40, and 49.

The leases which you have for machines Nos. 26, 40, and 49, dated December 13, 1923, February 2, 1924, and February 13, 1924 may or may not apply to machines which are still in [existence.]

However, the said leases contain words relative to purchase by your company from the Louis G. Freeman Company of certain listed items on which we expected to get patents. This aspect of the leases has never been mentioned between us in sixteen years, has never been respected by you or enforced by us and you have never bought any dies from us for these machines. We never raised any issue in this regard and never intend to, and advise you that the old leases if you wish to retain them should read with the matter above referred to deleted, as far as we are concerned.

However, we trust that you will see fit to sign and return the substitute leases which we left with you.

Very truly yours,

THE LOUIS G. FREEMAN COMPANY,
BENJ. W. FREEMAN.

BWF/bw

[fol. 96] (Findings of Fact and Conclusions of Law of District Court.)

(Filed November 13, 1941.)

In the United States District Court
Eastern District of Missouri
Eastern Division.

Benjamin W. Freeman, and The Louis G. Freeman Company, Plaintiffs,	}	In Equity No. 11,629.
v.		
A. W. Altvater, and The Western Supplies Company, Defendants		

The above entitled cause having come on to be heard on evidence and arguments of counsel, the Court makes and enters the following findings of fact and conclusions of law:

Findings of Fact.

1.

This is a suit by Benjamin W. Freeman and The Louis G. Freeman Company, plaintiffs, both of Cincinnati, Ohio against A. W. Altvater and The Western Supplies Company, defendants, both of St. Louis, Missouri. The suit is for specific performance of a certain written contract entered into between Freeman and the defendants January 1, 1929.

2.

The 1929 contract was based upon Freeman patent No. 1,681,033 of August 14, 1928 for a Cut-Out Machine for Shoe Uppers. Under the 1929 contract, defendants were licensed to make certain dies coming within the monopoly of the original Freeman patent, within a limited territory [fol. 97] and for use with certain machines, upon payment of royalty. That contract, likewise, contained a negative covenant by which defendants agreed not to make any machines coming within the monopoly of the Freeman patent. In the contract, defendants waived a right to contest validity of the patent during its life.

3.

By a supplemental bill, plaintiffs set forth that the original Freeman patent had been reissued into two reissue patents, Nos. 20,202 and 20,203, both dated December 8, 1936. The supplement to the bill of complaint alleged that the two reissues had been substituted in the 1929 contract for the original Freeman patent.

4.

At the trial on the issue of specific performance, plaintiffs limited their charges to complaining that defendants have sold certain flat bed dies coming within claim 6 of reissue 20,202, which was claim 18 of the original patent, inside the licensed territory without paying royalty, or outside the licensed territory.

5.

Since the original contract, a prior suit on said contract between these same parties took place, accusing a certain model T. machine as having been sold by defendant, Western Supplies Company, in violation of the negative covenant of the 1929 contract. This first Freeman v. Altwater suit went to the Circuit Court of Appeals for this Circuit and is reported at 66 F. (2d) 506. It is now before a special Master on accounting.

[fol. 98]

6.

In the Freeman patent, a mask is described as a plate having a window surrounding the portions to be cut, to clamp, protect, and tension the work, with one edge of the window shaped like a portion of a fixed pattern of the ornamentation, for gauging purposes. The patent states that it specifically avoids gauging against marks not a fixed part of the design.

7.

Clamping plates for use in making shoes, that completely surround the portion of the work to be cut and approximate that portion in shape are illustrated in Kemp 573,274 and Cotton 320,228. Also clamping and gauging by the same element are shown in the prior art, such as Went-

worth 1,279,624 and the Knight dies proved to have been prior to Freeman. The Knight dies also show edges of cut-outs shaped to some fixed part of the design of a shoe upper.

8.

To avoid this prior art at all, the elements of claim 6 must mean that a mask is a clamping plate that has a window completely enclosing the cut-out portions and approximating the shape of the ornamentation to be cut, and that the mask has a gauge formed on one edge of the window, that at least partially surrounds the cutting edge of the die, and is accurately shaped to a fixed permanent part of the design on the upper, whereby the plate clamps, protects, and tensions the work all around the portion to be cut out and whereby the gauging edge, by registering with some permanent part of the internal design on the upper, aligns the upper in all directions so that the cut-outs will be produced in their proper place in the upper. Otherwise, claim 6 not only would depart from the objectives of the Freeman patent description but would also read upon the prior art.

[fol. 99]

9.

Plaintiff Freeman heretofore filed an ordinary infringement suit against Premier Machine Company, involving twenty-six claims of the original Freeman patent. On June 3, 1936, the First Circuit Court of Appeals, as reported at 84 F. (2d) 425, held twenty-three of the claims invalid and interpreted the other three, which it held valid.

10.

On November 11, 1936, Freeman filed a disclaimer in the United States Patent Office disclaiming claims 6-8, 10-17, 62-69, 71-74, 79 and 94 all inclusive from the original Freeman patent, these being the claims the First Circuit Court of Appeals held invalid.

11.

In the Premier suit, the First Circuit Court of Appeals limited claim 6 to a clamping mask and die with a window shaped to correspond to the outline of the stitched pattern of the perforations to be made, or corresponding in size

and shape to the pattern of the decorations to be perforated. The First Circuit Court of Appeals held that the mere use of a window in a clamping plate was not invention, and that the mere use of a straight or curved edge on a clamp for gauging purposes was not invention. This Court has arrived at the same conclusion and, therefore, agrees with these fact findings of the First Circuit Court of Appeals.

12.

The dies originally accused herein are identified as exhibits 1, 2, 3a, 4 and 5. After the trial, plaintiffs waived any contention of infringement by exhibits 3A, 4 and 5 which, therefore, are held not to infringe.

[fol. 100]

13.

Exhibit 1 does not have a window in any sense of the word or any opening that completely surrounds a part of the work to be perforated. It, therefore, cannot have an edge portion of a window that partially surrounds the cutting edge of the die, which edge is shaped to act as a gauge. It is not shown to gauge against a fixed part of the design on the upper rather than an ink line.

14.

Exhibit 2 is an elevated gauge die and, therefore, cannot infringe because it lacks any clamping function of the type required by claim 6. It also lacks a window or opening completely surrounding the portion of the work to be perforated. It is not shown to gauge against a fixed part of the design on the upper rather than an ink line.

15.

Claim 6 cannot be interpreted as broad enough to include exhibits 1 and 2, because it would then read on the prior art, as above set forth. There is no measurable difference from the prior art, such as the Knight dies, until the cut-out is caused to be completely enclosed by a full window. Any changes short of this are merely changes in degree from the prior art.

16.

The foregoing findings of non-infringement are based upon an interpretation of claim 6 by the Freeman patent

description and the prior art. The Premier decision and the disclaimer serve to corroborate these findings.

[fol. 101]

17.

The original contract was based upon the original Freeman patent 1,681,033. Since this patent was surrendered and expired December 8, 1936, the original contract terminated at that time.

18.

The defendants, since the date of the reissues, have paid certain royalties under the original patent. Defendants were under an injunction in the first Freeman v. Altvater suit to pay such royalties, but defendants protested payment in correspondence with plaintiffs and by numerous legal actions. Defendants have not indicated any acceptance of the reissues to form a new contract.

19.

The First Circuit Court of Appeals in the Premier case held that Freeman did not invent a machine. That Court specifically held that claims to the elevated anvil for receiving closed uppers, were invalid. In this connection, it is found that the use of a presser member with or without a work support mounted independently therefrom is not novel, that backing material is not novel, that one revolution clutches are not novel, reference being made to the Knight machine, and the patents to Schwallback No. 1,313,956, Leavitt No. 620,659, and Newton No. 1,439,019. These elements do not act any differently on an anvil die machine than on a flat bed machine. There was no patentable basis upon which to base Reissue 20,203, after the Premier decision, and it contains no patentable subject matter.

20.

Freeman's subsequent disclaimer of all claims held invalid by the First Circuit constituted an abandonment of their subject matter. But Freeman retained claims not [fol. 102] definitely distinguishable therefrom, such as claims 9, 19 and 87. Freeman also retained and carried over into the reissues claims not distinguishable over the

disclaimed subject matter. Reference is made to claim 7 of reissue 20,202 and claims 1-33 of reissue 20,203.

21.

The reissues do not accord with the findings of the First Circuit. They were issued without consideration of the disclaimer and their records do not show any consideration of the prior art, or the Premier decision.

22.

Claims 34-40 of reissue 20,203 are either method claims or structure claims that seek to distinguish from the prior art by reciting a purported new use. There is no evidence in the original patent of an intention to claim a method and upon which a basis for method claims in the reissues can be found. These new claims were not embodied in any waiver of [contestibility] by the defendants. All of these claims are invalid as being merely for a new use of old structure.

23.

Claims 2, 3 and 7 of reissue 20,202 are unpatentable over claims disclaimed.

24.

The Court of Appeals of this Circuit in the first *Freeman v. Altvater* suit did not rule on flat bed dies. It ruled only on elevated anvil dies, particularly as used on the model T machine, which machine was the basis of that decision.

25.

It cannot be concluded that the Court of Appeals in the first *Freeman v. Altvater* suit decided that any dies were [fol. 103] infringement per se independently of the model T machine; or that claim 6 which is the basis of the present suit and which was claim 18 in the original patent, was necessarily infringed by the dies considered in that suit. There were other claims in that suit, at least one of which was abandoned in the reissues, which could have been the basis for holding the dies of the model T machine to be within the monopoly of the original *Freeman* patent.

26.

The Eighth Circuit Court of Appeals in the first *Freeman v. Altvater* decision, did not and could not have con-

sidered the eviction, the Premier decision, the disclaimer, or the reissue situation, as all of these occurred after its decision.

27.

The denial of defendants' Petition for Leave to File a Bill in the Nature of a Bill of Review in the first Freeman v. Altvater suit did not, as a matter of fact, require consideration of the merits of the matters set up therein; and the denial did not involve a question of whether the merits contained in the proposed Bill in the Nature of a Bill of Review would affect the present case.

28.

The decision of Western Supplies Company v. Freeman, 109 F. (2d) 693 contains no elements of estoppel by judgment or res adjudicata, but rather states that the questions there presented could be raised in the present suit.

29.

The plaintiffs have entered into license and lease agreements involving the patent in suit that attempt to monopolize and limit competition in unpatented dies and machines. Such contracts were in existence at the time of this suit and at the time of the trial.

[fol. 104]

30.

Defendants by a counterclaim have put into issue the nature of the contract rights they would have under the reissue patents, if such patents were valid. Owing to the present holdings, it is unnecessary to determine these rights and liabilities. If, however, such rights and liabilities were to be found, the facts are that they would have to be limited to the three claims held valid by the First Circuit Court of Appeals and as interpreted herein. If the reissues were not invalid, defendants would be entitled to a new contract substituting reissue 20,202, as herein interpreted, for the original Freeman patent.

Conclusions of Law.

1.

Defendants have the right to limit the scope of a patent under which they are licensed.

2.

Claim 6 of reissue 20,202, the only claim here in suit, is not infringed by the accused structures.

3.

Defendants, in a suit on a license, are entitled to set up an eviction based upon an extraneous decree on the patent forming the basis of the suit.

4.

The Freeman v. Premier decision constitutes an eviction and the rights of the parties to this license are determined in the light of that decision since its date, to-wit, June 3, 1936.

[fol. 105]

5.

The Premier decision evicted Freeman from any claim to a patent monopoly on a machine, and also from any claim to a monopoly on the so-called anvil type of die holder. Reissue 20,203 is devoid of patentable subject matter.

6.

At all times, the decisions of a foreign Circuit Court of Appeals are entitled to great weight, and even though the decision of the First Circuit Court of Appeals, as to the validity of the patent claims, would not bind this Court ordinarily, nevertheless, the disclaimers have rendered it impossible to present those claims of this patent to any other court, except as permitted by R. S. 4917, because they can never be reclaimed under any Freeman patent.

7.

It is required that one disclaiming certain subject matter shall disclaim all subject matter that is not definitely distinguishable therefrom. Upon failure to do so, the entire patent is invalid. Freeman here disclaimed certain subject matter but retained claims to subject matter not definitely distinguishable from that disclaimed. Thereby the entire Freeman patent became invalid one month prior to the grant of the reissues.

8.

Taking the reissues did not alter the invalidity because (1) the original patent upon which the reissues must be based had become invalid prior to the granting of the reissues owing to the improper disclaimer, and because (2) the reissues are merely the result of the actions of an administrative branch of the government, which cannot be used as a medium to foreclose the judiciary from decreeing the impropriety of the disclaimer. Additionally, the reissues 20,202 and 20,203 here include claims [fol. 106] not definitely distinguishable from claims disclaimed and are, therefore, inherently invalid for improper disclaimer.

9.

The original contract between these parties terminated as of the date of the surrender of the original Freeman patent, which is the date the reissues were issued, December 8, 1936.

10.

The defendants have not so acted as to foreclose them from the right to set up the eviction, or to have effected a new contract by implication.

11.

Equity will not decree that the defendants-licensees must be foreclosed from their established right to set up the eviction from an original patent by plaintiffs-licensor's ex parte expedient of obtaining reissues.

12.

The first Freeman v. Altvater decree created no res adjudicata here, because it is not a final decree, because the issues are different in the present suit so that at most an estoppel by judgment could arise; and because the eviction, the Premier decision, the disclaimer, and the reissues could not have been raised in that suit.

13.

No estoppel by judgment arises from the first Freeman v. Altvater suit, because it cannot be concluded that a

ruling of infringement of claim 18 of the original patent, now claim 6 of reissue 20,202, was essential to the result of that decision. The interpretation of claim 6 is, therefore, at large. Also the present suit is against flat bed dies per se, whereas the first suit was against the model T dies in combination with the model T machine. An interpretation of a claim, as applied to one type of structure, is not conclusive to its interpretation as applied to a different type.

[fol. 107]

14.

No estoppel arises in this suit from the denial in the first Freeman v. Altvater suit of the "Petition for Leave to File a Bill in the Nature of a Bill of Review."

15.

No estoppel arises out of the suit Western Supplies Company v. Freeman reported at 109 F. (2d) 693.

16.

Since the reissues are invalid because of the improper disclaimer and the eviction, no contract exists. If the reissues were valid, they would be limited as herein stated and the contract would be correspondingly limited.

17.

Plaintiffs, by virtue of their improper attempt to obtain a monopoly upon unpatented articles, come into equity with unclean hands and cannot maintain this action.

18.

The bill of complaint should be dismissed; the supplement to the bill of complaint should be dismissed. The counterclaim should be granted.

CHARLES B. DAVIS,
United States District Judge.

November ..., 1941, St. Louis, Missouri.

[fol. 108]

Judgment.

(Filed Nov. 13, 1941.)

In the United States District Court
 Eastern District of Missouri
 Eastern Division

Benjamin W. Freeman and The
 Louis G. Freeman Company,
 Plaintiffs,

vs.

A. W. Altvater, and The Western
 Supplies Company,
 Defendants.

In Equity No. 11,629

This cause having come up to be heard on the bill of complaint, supplement to the bill of complaint, answer to the bill of complaint, answer to the supplement to the bill of complaint and counterclaim, trial having been had on the issues joined, briefs having been filed, and the court having filed its findings of fact and conclusions of law, it is hereby

Ordered, Adjudged and Decreed that:

1.

Exhibits 1, 2, 3A, 4 and 5 do not infringe Reissue Patent No. 20,202.

2.

The original contract of January 1, 1929, between the parties hereto, was terminated as of December 8, 1936, the date of the reissue patents. Since that time no new contract has been entered into.

3.

Freeman was evicted from any monopoly on a machine on the date of the decision in Freeman v. Premier Machine Co., June 5, 1936. On that same date he was evicted from [fol. 109] claiming any scope for a mask die beyond that set forth in the Findings of Fact herein filed. On the date of his disclaimer, November 11, 1936, these facts became fixed and unchangeable by the filing of the disclaimer. The original Freeman patent No. 1,681,033, became invalid November 11, 1936. The reissue patents 20,202 and 20,203 are invalid.

4.

The bill of complaint and the supplement thereto are hereby dismissed.

5.

The issues on the counterclaim are found in favor of defendants and the counterclaim is granted as herein set forth.

6.

The costs of this suit are awarded to the defendants.

CHARLES B. DAVIS,
United States District Judge.

November, 1941
St. Louis, Missouri.

[fol. 110] (Transcript of Testimony.)
(Filed January 30, 1942.)

And thereupon the plaintiffs, to sustain the issues in their behalf, offered the following evidence:

Mr. Allen: I would like to introduce in evidence, as Plaintiffs' Exhibit No. 1, defendants' clamp gauge die.

The Court: Defendants' what?

Mr. Allen: Clamp gauge die, and so the reporter will mark it.

(The said die was marked by the reporter as Plaintiffs' Exhibit No. 1.)

Plaintiffs' Exhibit No. 1 offered in evidence. (Physical Ex.)

Mr. Allen: As Plaintiffs' Exhibit No. 2, defendants' elevated gauge die.

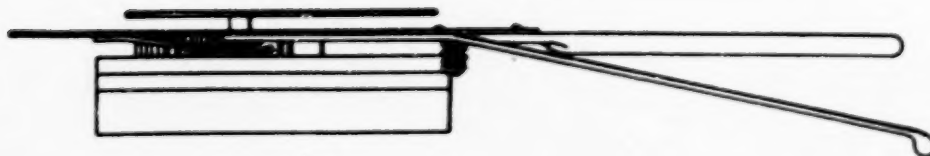
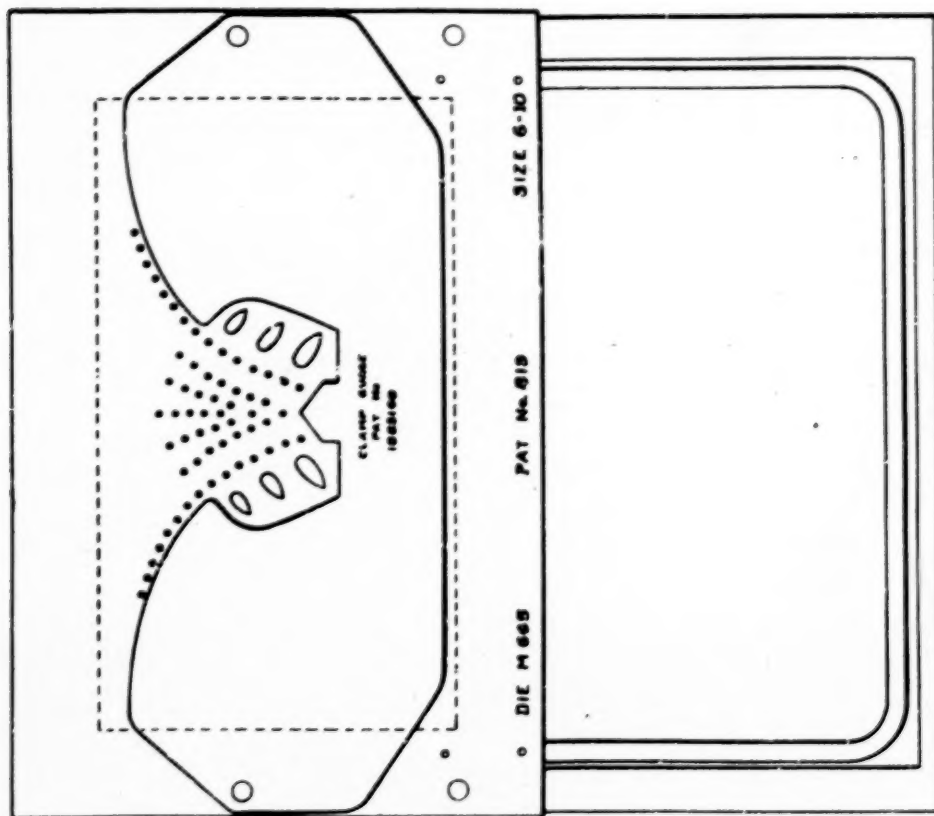
(The said die was marked by the reporter as Plaintiffs' Exhibit No. 2.)

Plaintiffs' Exhibit No. 2 offered in evidence. (Physical Ex.)

Mr. Allen: As Plaintiffs' Exhibit No. 3-A, drawing of defendants' clamp gauge die.

(The said drawing was marked by the reporter as Plaintiffs' Exhibit No. 3-A.)

PLAINTIFF'S EXHIBIT 3



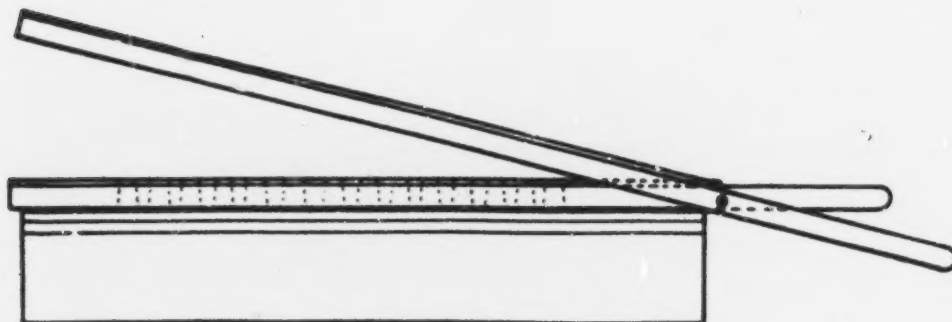
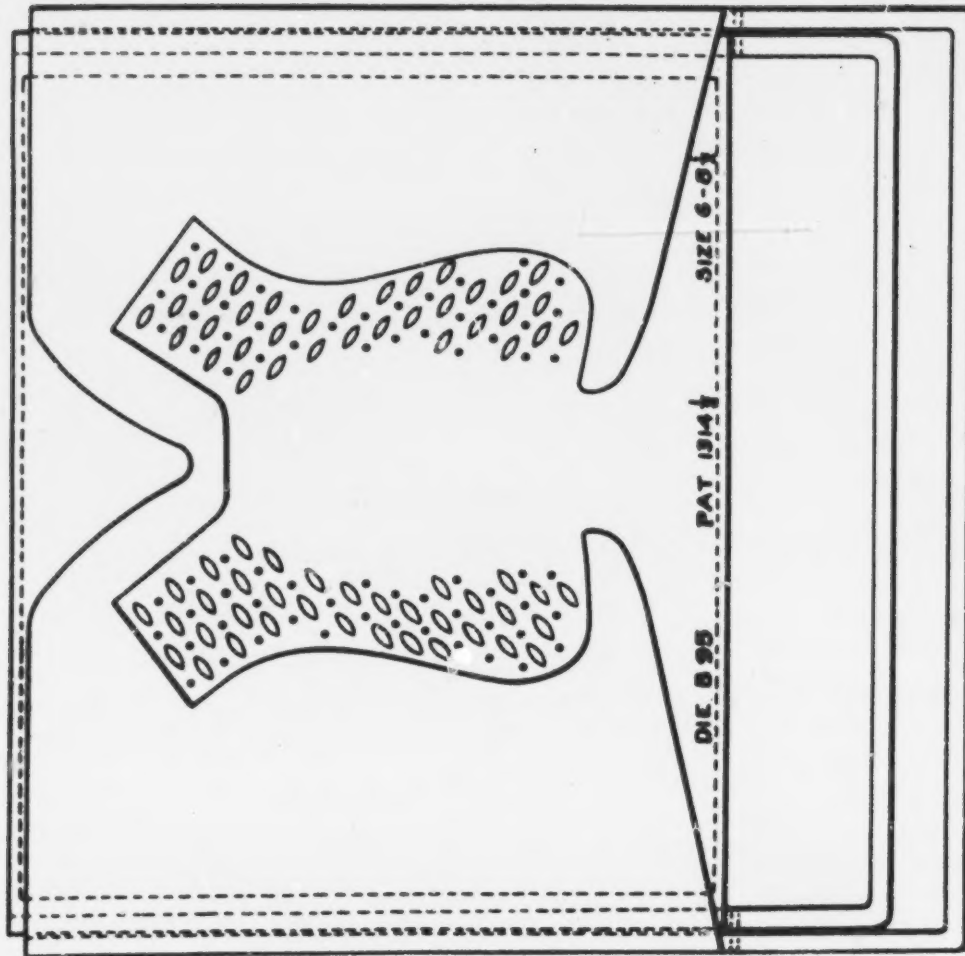
[fol. 112] Plaintiffs' Exhibit No. 3-A offered in evidence.
(This Ex. attached to Ex. #8.)

Mr. Allen: As Plaintiffs' Exhibit No. 4, defendants' clamp gauge die drawing.

(The said defendants' clamp gauge die drawing was marked by the reporter as Plaintiffs' Exhibit No. 4.)

Plaintiffs' Exhibit No. 4 offered in evidence.

PLAINTIFF'S EXHIBIT 4

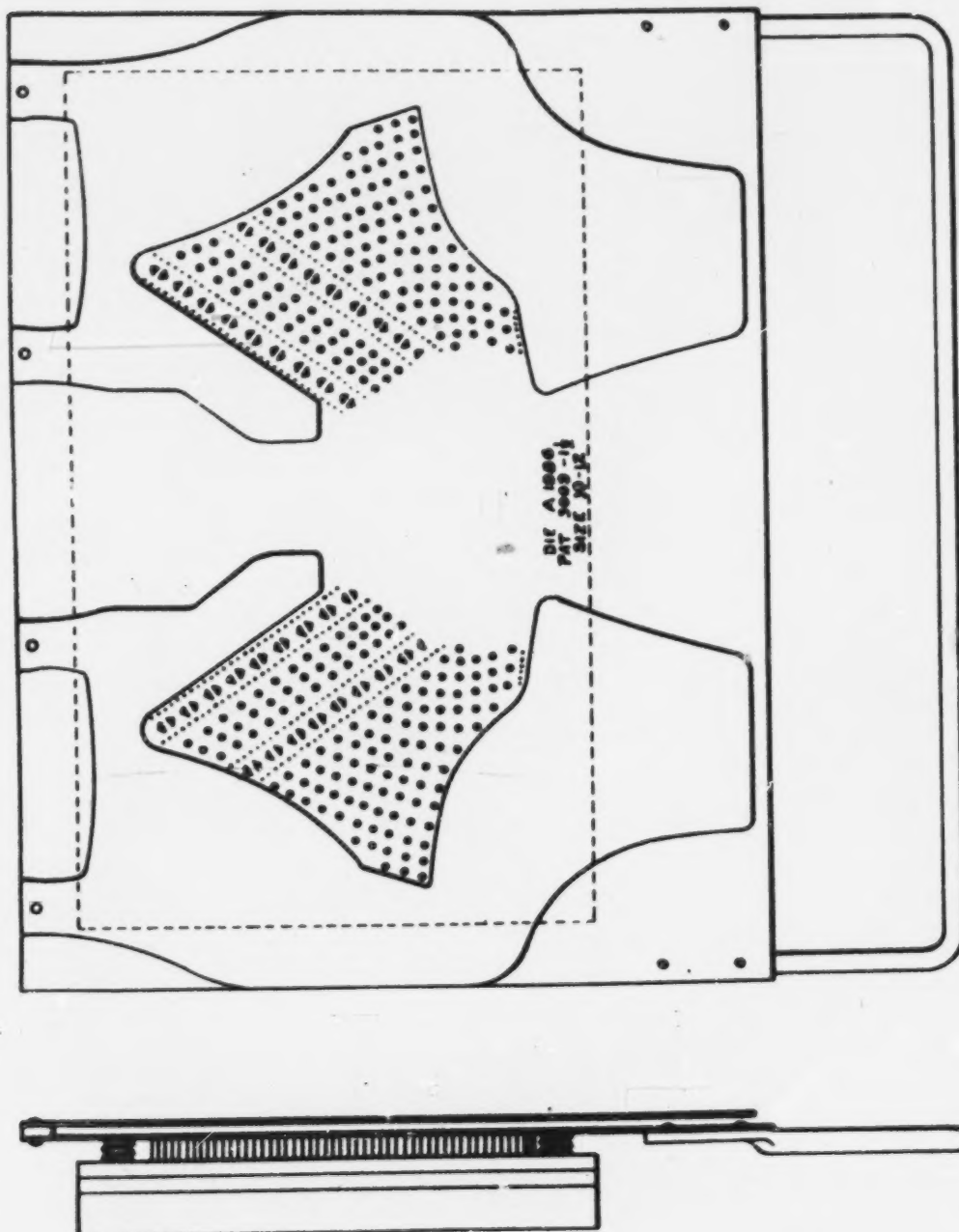


[fol. 114] Mr. Allen: As Plaintiffs' Exhibit No. 5, defendants' elevated gauge drawing.

(The said defendants' elevated gauge drawing was marked by the reporter as Plaintiffs' Exhibit No. 5.)

Plaintiffs' Exhibit No. 5 offered in evidence.

PLAINTIFF'S EXHIBIT 5



[fol. 116] Mr. Allen: As Plaintiffs' Exhibit No. 6, interrogatories addressed to the defendant, to which were attached the exhibits now referred to and numbered as I have now numbered them, except for an attachment marked Plaintiffs' Exhibit No. 3, which was later corrected.

(The said interrogatories were marked by the reporter as Plaintiffs Exhibit No. 6.)

Plaintiffs' Exhibit No. 6 offered in evidence.

Mr. Allen: I also offer in evidence photographs of dies attached to the interrogatories, Plaintiffs' Exhibits Nos. 1-A, 1-B, 2-A, and 2-B. Those, by the way, are photographs of the two physical exhibit dies in plan and elevation.

(The said documents were marked by the reporter as Plaintiffs' Exhibits Nos. 1-A, 1-B, 2-A, and 2-B, respectively.)

Plaintiffs' Exhibits Nos. 1-A, 1-B, 2-A, and 2-B, attached to interrogatories, offered in evidence.

[fol. 117] (Plaintiffs' Exhibit 6.)

(Interrogatories of Plaintiffs propounded to Defendants.)

(Filed February 21, 1936.)

In the United States District Court,
Eastern District of Missouri,
Eastern Division.

Benjamin W. Freeman and The
Louis G. Freeman Company,
Plaintiffs,

vs.

A. W. Altvater and The Western
Supplies Company,
Defendants.

In Equity No. 11,629

Now come the Plaintiffs and pray leave to submit to the corporate defendant, same to be answered by A. W. Altvater, president of said corporation, and also by said Altvater as a defendant in this cause, the following interrogatories:—

1. Plaintiffs submit herewith photographs marked Exhibit 1a and Exhibit 1b, constituting respectively a plan view and a side view of a flat bed die, and file herewith in Court marked Plaintiffs' Exhibit 1, the die from which the said photographs were taken.

(a) Please state whether this die was manufactured and sold by Western Supplies Co. since January 1st, 1929, and prior to the bringing of this suit.

(b) As to this die, state whether it is an elevated gauge or a clamp gauge die.

(c) State the geographical location of factory to whom it was sold.

[fol. 118] 2. Plaintiffs submit herewith photographs marked Exhibit 2a and Exhibit 2b, constituting respectively a plan view and a side view of a flat bed die, and file herewith in Court, marked Plaintiffs' Exhibit 2, the die from which the said photographs were taken.

(a) Please state whether this die was manufactured and sold by Western Supplies Co. since January 1st, 1929, and prior to the bringing of this suit.

(b) As to this die, state whether it is an elevated gauge or a clamp gauge die.

(c) State the geographical location of factory to whom it was sold.

3. Plaintiffs submit herewith photostat marked Plaintiffs' Exhibit 3, and being a photostat showing a side view and plan view of a die marked Pat. 819, Die No. M-665.

(a) Please state whether this die was manufactured and sold by Western Supplies Co. since January 1st, 1929, and prior to the bringing of this suit.

(b) As to this die, state whether it is an elevated gauge or a clamp gauge die.

(c) State the geographical location of factory to whom it was sold.

4. Plaintiffs submit herewith photostat marked Plaintiffs' Exhibit 4, and being a photostat showing a side view and plan view of a die marked Pat. 1314½, Die No. B 95.

(a) Please state whether this die was manufactured and sold by Western Supplies Co. since January 1st, 1929, and prior to the bringing of this suit.

(b) As to this die, state whether it is an elevated gauge or a clamp gauge die.

[fol. 119] (c) State the geographical location of factory to whom it was sold.

5. Plaintiffs submit herewith photostat marked Plaintiffs' Exhibit 5, and being a photostat showing a side view and plan view of a die marked Pat. 3009-11½, die No. A 1986.

(a) Please state whether this die was manufactured and sold by Western Supplies Co. since January 1st, 1929, and prior to the bringing of this suit.

(b) As to this die, state whether it is an elevated gauge or a clamp gauge die.

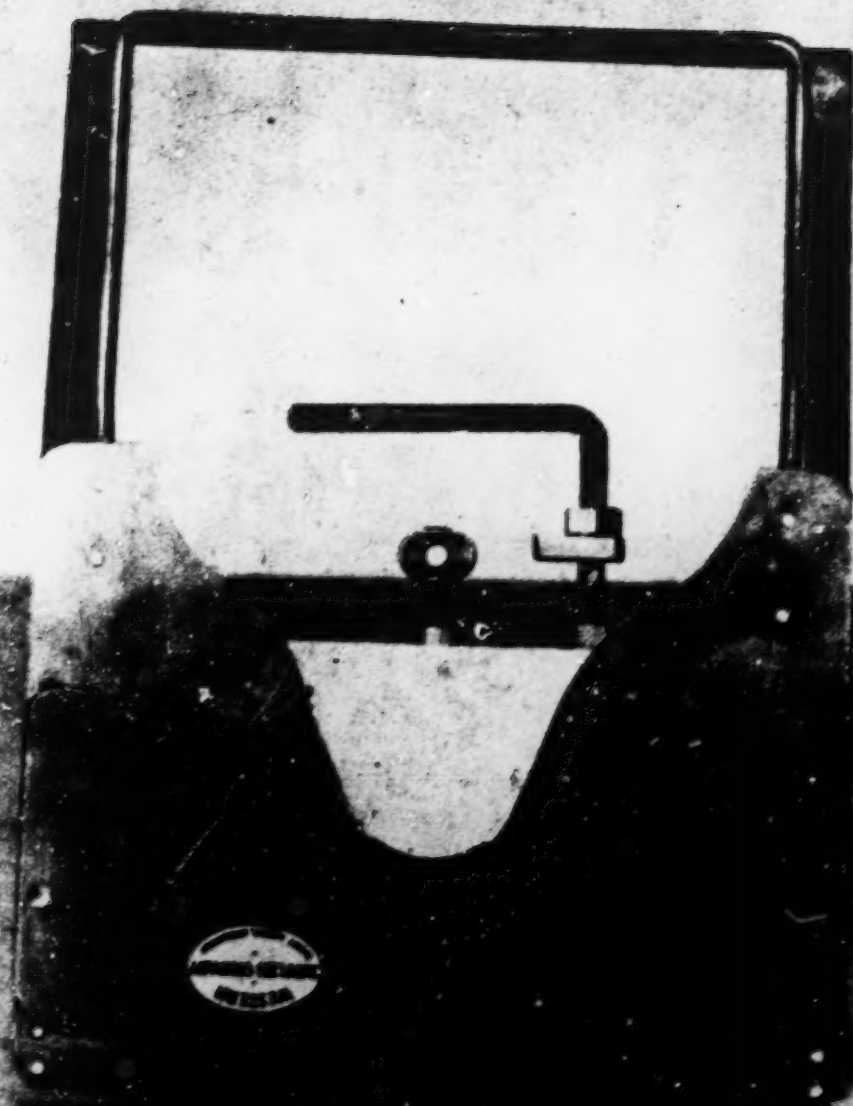
(c) State the geographical location of factory to whom it was sold.

**BENJAMIN W. FREEMAN and
THE LOUIS G. FREEMAN COMPANY,**

By ALLEN & ALLEN,
Attorneys.

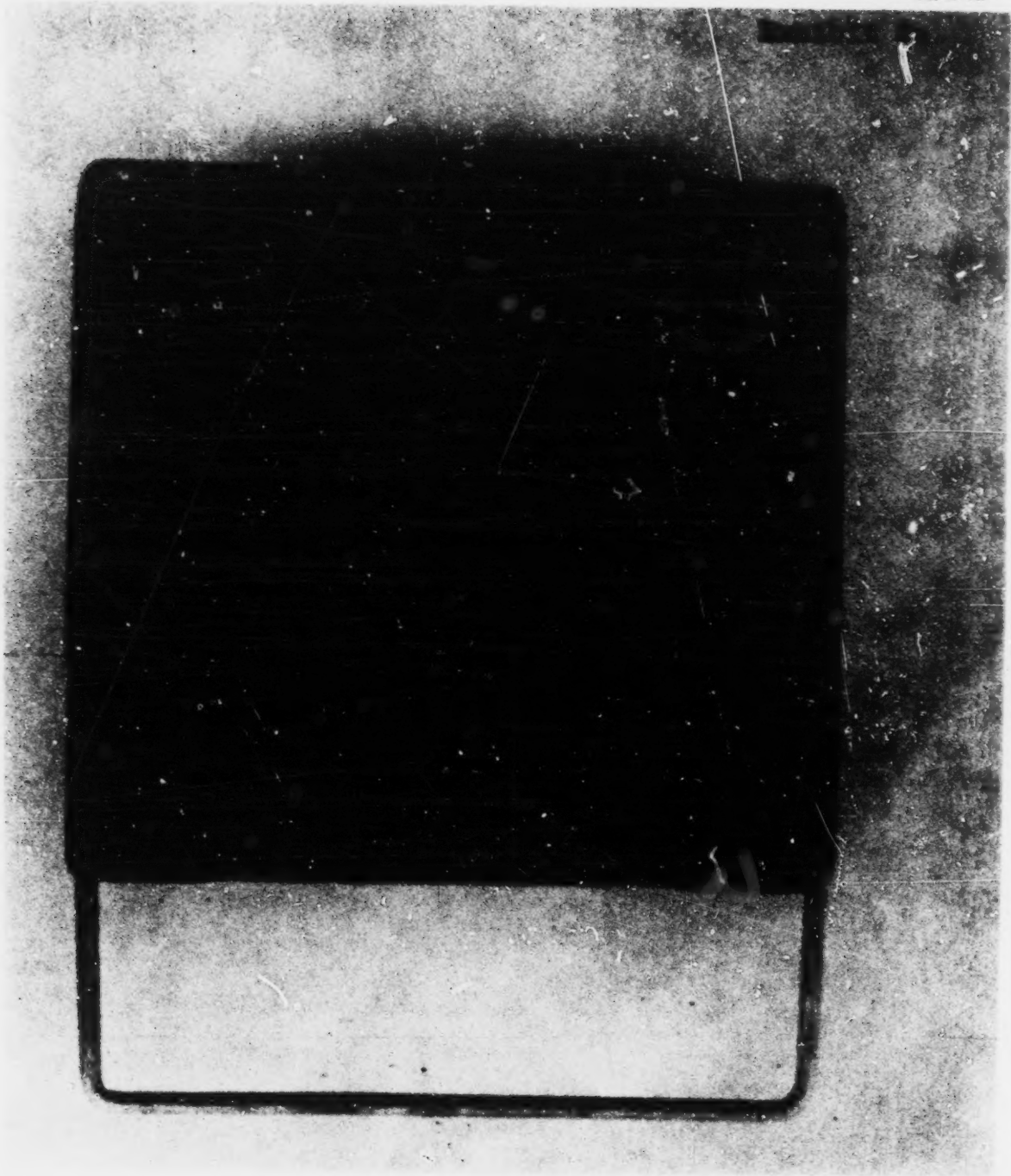
The leave prayed for
above is granted.

CHARLES B. DAVIS,
U. S. District Judge.
MA*P

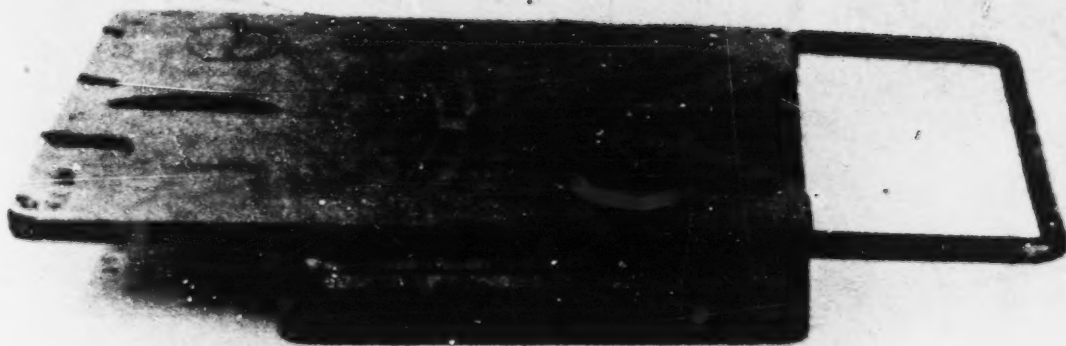


101
Exhibit 1b.





105
Exhibit 2b.



[fol. 124] Mr. Allen: I offer in evidence as Plaintiffs' Exhibit No. 7, defendants' answers to interrogatories dated April 14, 1936.

(The said document was marked by the reporter as Plaintiffs' Exhibit No. 7.)

Plaintiffs' Exhibit No. 7 offered in evidence.

[fol. 125] (Plaintiffs' Exhibit 7.)

(Answers of Defendants to Interrogatories propounded by Plaintiffs.)

In the United States District Court
Eastern District of Missouri
Eastern Division.

Benjamin W. Freeman and The
Louis G. Freeman Company,
Plaintiffs,

v.

A. W. Altvater, and The Western
Supplies Company,
Defendants.

In Equity No. 11,629.

Answering plaintiffs' interrogatories, defendants state as follows:

1.

Concerning plaintiffs' Exhibit 1:

(a) Yes; this die was manufactured etc. by Western Supplies Co.

(c) Rochester, New York.

2.

Concerning plaintiffs' Exhibit 2:

(a) Yes, this die was manufactured etc. by Western Supplies Co.

(c) Cannot be answered without further information from plaintiffs, but, if plaintiffs will indicate the place where it was found, defendants may be able to answer the interrogatory.

3.

(a) No, this die was not made by Western Supplies Co.

(c) See (a).

[fol. 126]

4.

Concerning plaintiffs' Exhibit 4:

(a) Yes, this die was manufactured, etc. by Western Supplies Co.

(c) Sullivan, Ill.

5.

Concerning plaintiffs' Exhibit 5:

(a) Yes, this die was manufactured, etc. by Western Supplies Co.

(c) Moberly, Mo.

THE WESTERN SUPPLIES COMPANY

By ARTHUR W. ALTVATER,

President.

ARTHUR W. ALTVATER,

Pro Se.

Arthur W. Altvater, being duly sworn, says that the above answers are full, true and complete responses to the interrogatories propounded by plaintiffs, insofar as they can be given.

ARTHUR W. ALTVATER.

Subscribed and sworn to before me this 14 day of April, 1936.

GEORGE H. STEPHENS,

(Seal)

Notary Public.

My Commission expires Sept. 19, 1937.

Service of the foregoing acknowledged, with waiver of requirement to answer part (b) of any interrogatory.

BRUNINGA AND SUTHERLAND,

Attorneys for Plaintiffs.

[fol. 127] Mr. Allen: I offer in evidence as Plaintiffs' Exhibit No. 8, amended interrogatories and answers thereto, bound together, with a stipulation dated June 11, 1936.

(The said amended interrogatories and answers thereto, bound together, with a stipulation dated June 11, 1936, was marked by the reporter as Plaintiffs' Exhibit No. 8.)

Plaintiffs' Exhibit No. 8 Offered in Evidence. (Ex. 3-A Attached Hereto)

[fol. 128] (Plaintiffs' Exhibit 8.)

(Stipulation and Amended Interrogatories of Plaintiffs propounded to Defendants and Answers thereto.)

In the United States District Court
Eastern District of Missouri
Eastern Division

Benjamin W. Freeman and The
Louis G. Freeman Company,
Plaintiffs,

vs.

A. W. Altvater and The Western
Supplies Company,
Defendants.

In Equity No 11,629

It is hereby stipulated and agreed by and between counsel for the parties to the above-entitled cause, that the annexed Amended Interrogatories propounded by plaintiffs to defendants as well as the annexed Answers of defendants thereto, may be filed in the above-entitled cause with the same force and effect as if leave of Court had been obtained for filing the interrogatories and the answers thereto had been made pursuant to the Equity Rules.

BRUNINGA & SUTHERLAND,
[Solicitor] for Plaintiffs.

St. Louis Mo.
June 11, 1936.

LAWRENCE C. KINGSLAND,
Solicitor for Defendants.

St. Louis, Mo.
June 11 1936

[fol. 129]

Amended Interrogatories.
In the United States District Court,
Eastern District of Missouri,
Eastern Division

Benjamin W. Freeman and The
Louis G. Freeman Company,
Plaintiffs,

vs.

A. W. Altvater, and The Western
Supplies Company,
Defendants.

In Equity No. 11,629

Now [comes] the plaintiffs and submit that the answers to interrogatories by the defendants in this cause are not full and complete, and request further information of the defendants, and accordingly the plaintiffs submit the following, which they pray the Court to allow as additional interrogatories in order to obtain complete answers of the defendants.

1. Hereto attached is an amended drawing marked Exhibit 3A, to take the place of the former drawing, Exhibit 3, which drawing now shows the particular die in question numbered correctly and with a correct relationship of handles thereto, and asks of the defendants:

(a) Was a die as illustrated in the attached drawing, Ex. 3, manufactured and sold by the defendants since the issuance of the patent in suit, and prior to the filing of the [fol. 130] Bill of Complaint herein? If not, wherein does it differ from defendants' die of the number noted?

(b) State the geographical location of the factory to whom this die was sold.

2. The plaintiffs hereby advise that the die shown in photographs Ex. 2 and 2a of the former interrogatories, was obtained in Chicago, Illinois. Accordingly will defendants kindly

(c) State the geographical location of the factory to whom this die was sold?

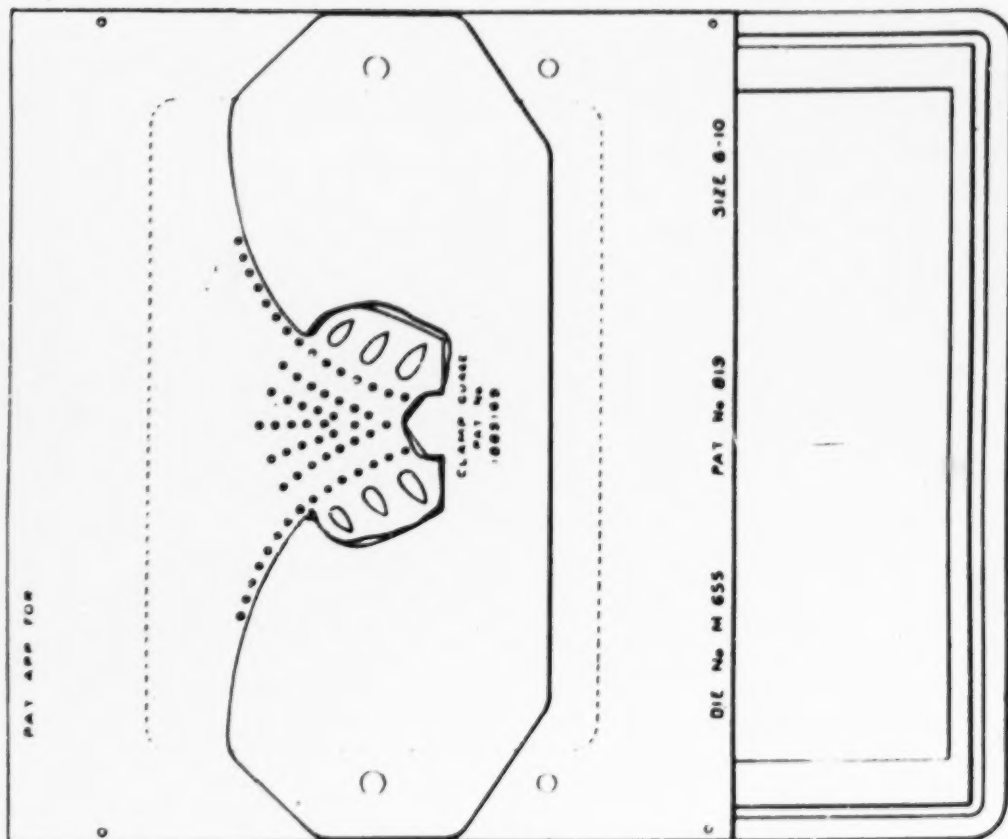
BENJAMIN W. FREEMAN, et al.,

By BRUNING & SUTHERLAND,

Attorneys and Solicitors.

MA•P

PLAINTIFF'S EXHIBIT 3A



Plt

3-A 400

[fol. 132] Defendant's Answers to Plaintiffs' Amended Interrogatories.

In the United States District Court
Eastern District of Missouri
Eastern Division.

Benjamin W. Freeman and The
Louis G. Freeman Company,
Plaintiffs,

v.

In Equity No. 11,629

A. W. Altvater, and The Western
Supplies Company,
Defendants.

In answering plaintiffs' amended interrogatories, defendants state as follows:

1.

Concerning Exhibit 3-A

(a) Yes; the die was manufactured, etc. by The Western Supplies Company.

(b) Vincennes, Indiana.

2.

Concerning plaintiffs' exhibits 2-A and 2-B

(c) Chicago, Illinois.

THE WESTERN SUPPLIES COMPANY,
By LAWRENCE C. KINGSLAND,
Attorney.

St. Louis, Missouri
June 11, 1936

[fol. 133] Mr. Allen: The bill of complaint has attached to it the original patent No. 1,681,033 and the contract between the parties. I ask to have the contract marked "Exhibit A" attached to the Bill of Complaint marked in evidence as Plaintiffs' Exhibit No. 9.

(The said contract was marked by the reporter as Plaintiffs' Exhibit No. 9.)

Plaintiffs' Exhibit No. 9 offered in evidence.

(Plaintiffs' Exhibit 9.)

Plaintiffs' Exhibit 9 is the License Contract between Benjamin W. Freeman and Western Supplies Company and Arthur W. Altvater, dated January 1, 1929, and same is omitted at this place in the printed record for the reason such Exhibit heretofore appears in this printed record as a part of the Bill of Complaint at folio page 9a.

[fol. 149] Mr. Allen: I may say that the answer admits the contract.

Now, Mr. Kingsland, do you want to get our stipulation with regard to printed copies?

It is stipulated between the parties that printed copies of United States letters patent and photostats of foreign patents and publications may be introduced in evidence, and with the full force and effect of the original, subject to corrections where such may be made to appear.

Mr. Kingsland: That is all right.

Mr. Allen: I offer in evidence as Plaintiffs' Exhibit No. 10 the original patent No. 1,681,033.

(The said document was marked by the reporter as Plaintiffs' Exhibit No. 10.)

Plaintiffs' Exhibit No. 10 offered in evidence.

[fol. 150] (Plaintiffs' Exhibit 10.)

(Letters Patent No. 1,681,033 to B. W. Freeman,
August 14, 1928.)

Aug. 14, 1928.

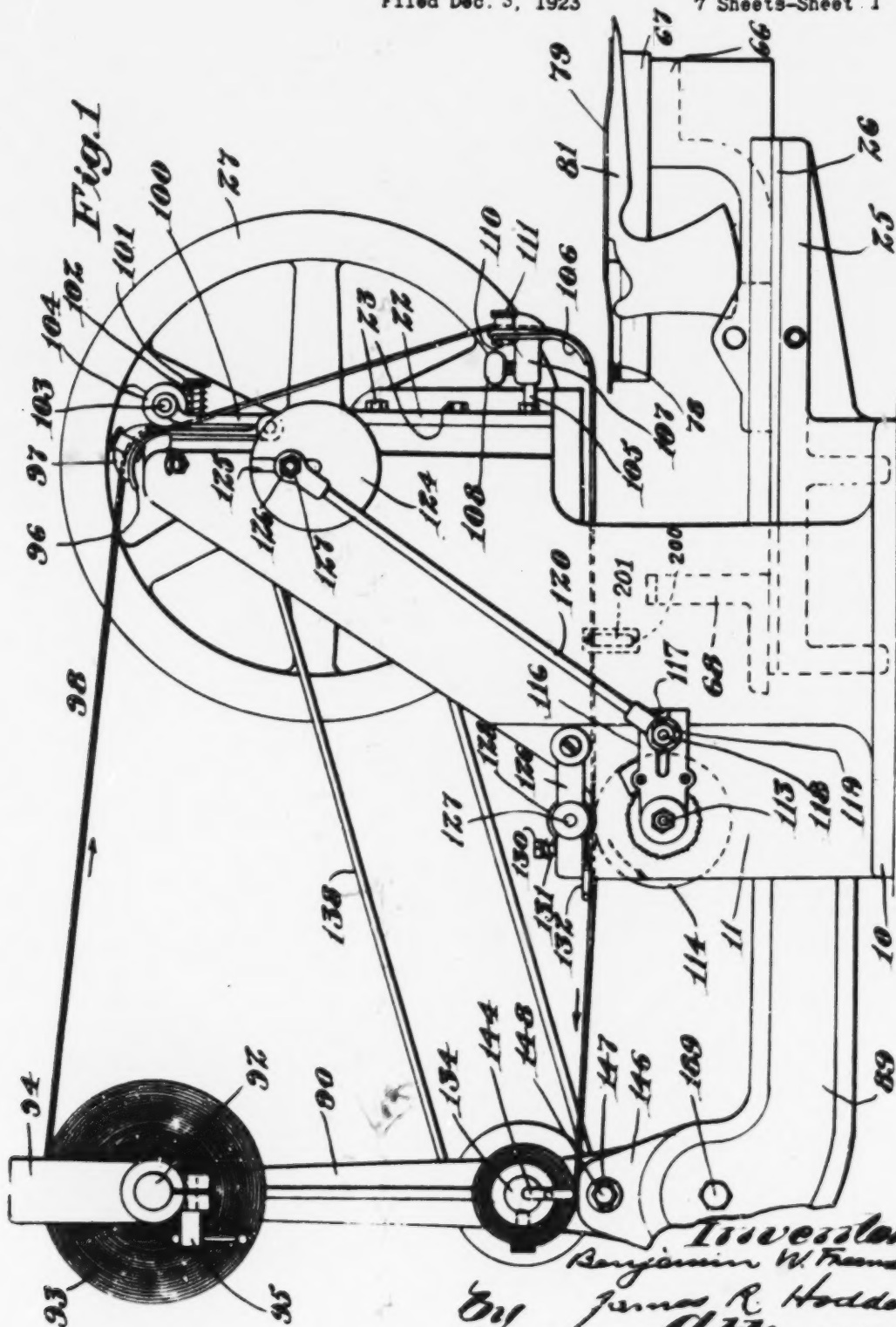
1,681,033

B. W. FREEMAN

CUT OUT MACHINE FOR SHOE UPPERS

Filed Dec. 3, 1923

7 Sheets-Sheet 1



Aug. 14, 1928.

B. W. FREEMAN

1,681,033

CUT OUT MACHINE FOR SHOE UPPERS

Filed Dec. 3, 1923

7 Sheets-Sheet 2

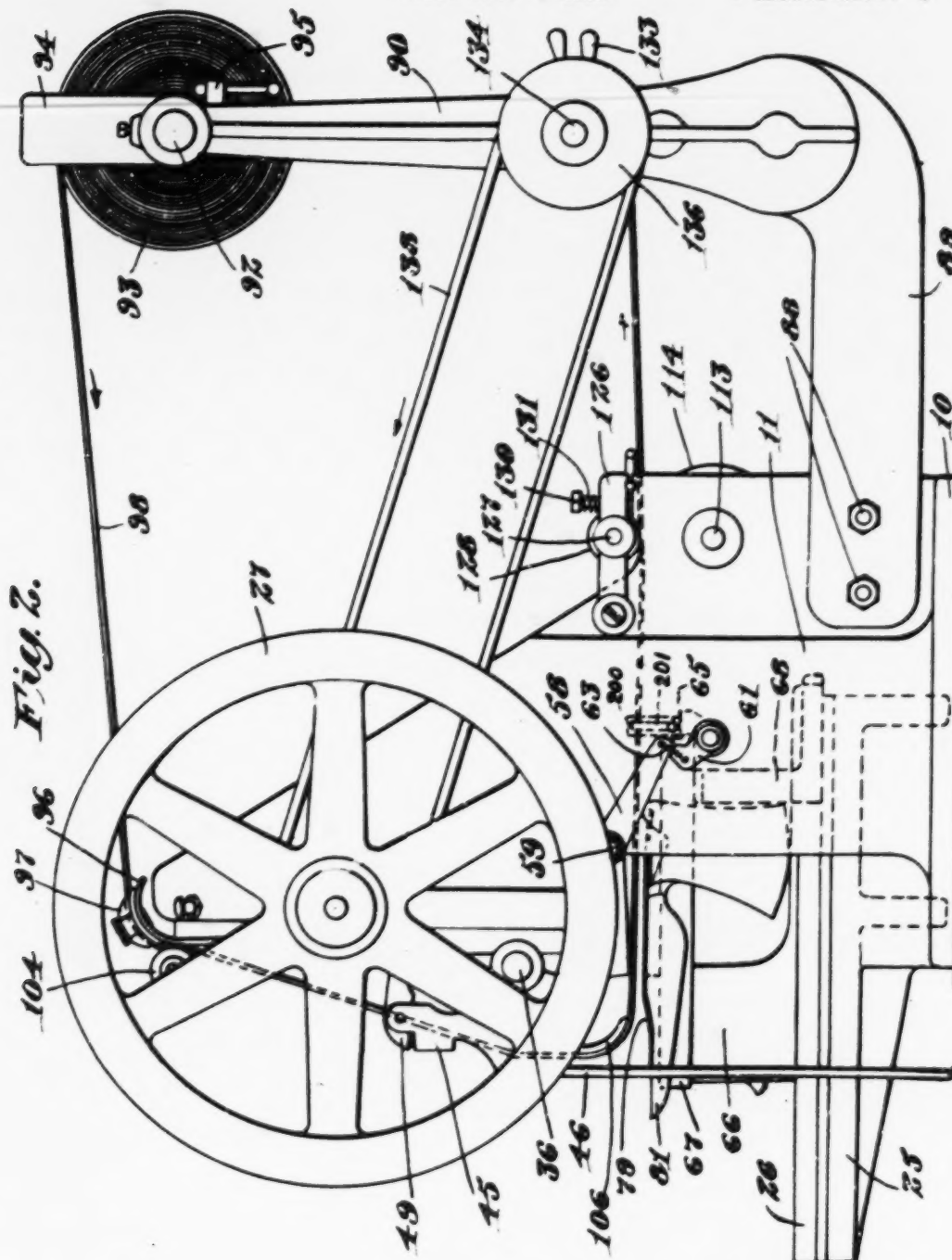


Fig. 2.

Inventor
 Benjamin W. Freeman
 by James R. Howard
 Attorney

Aug. 14, 1928.

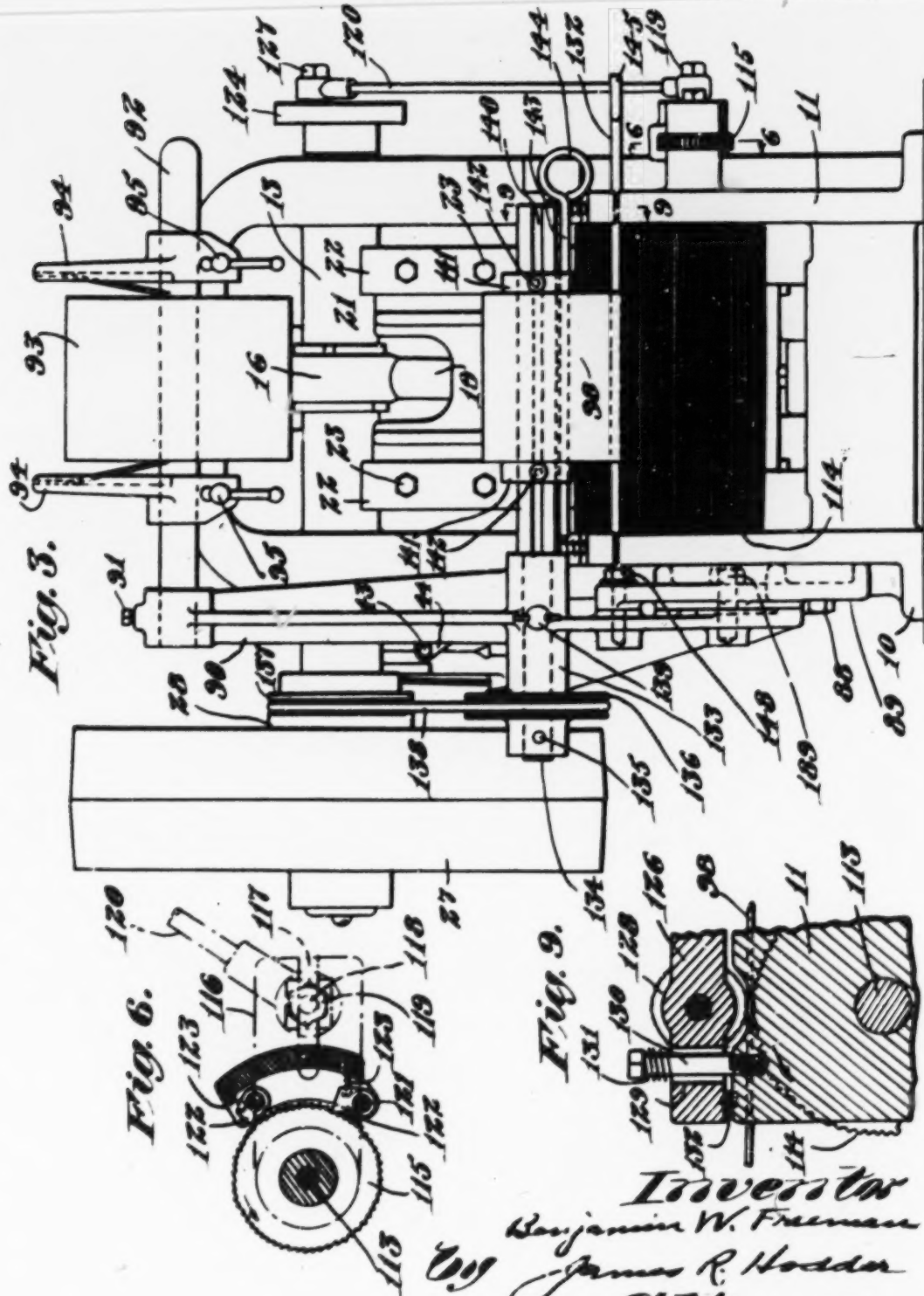
B. W. FREEMAN

1,681,033

CUT OUT MACHINE FOR SHOE UPPERS

Filed Dec. 3, 1923

7 Sheets-Sheet 3



Inventor
 Benjamin W. Freeman
 By James R. Hodson
 Attorney

Aug. 14, 1928.

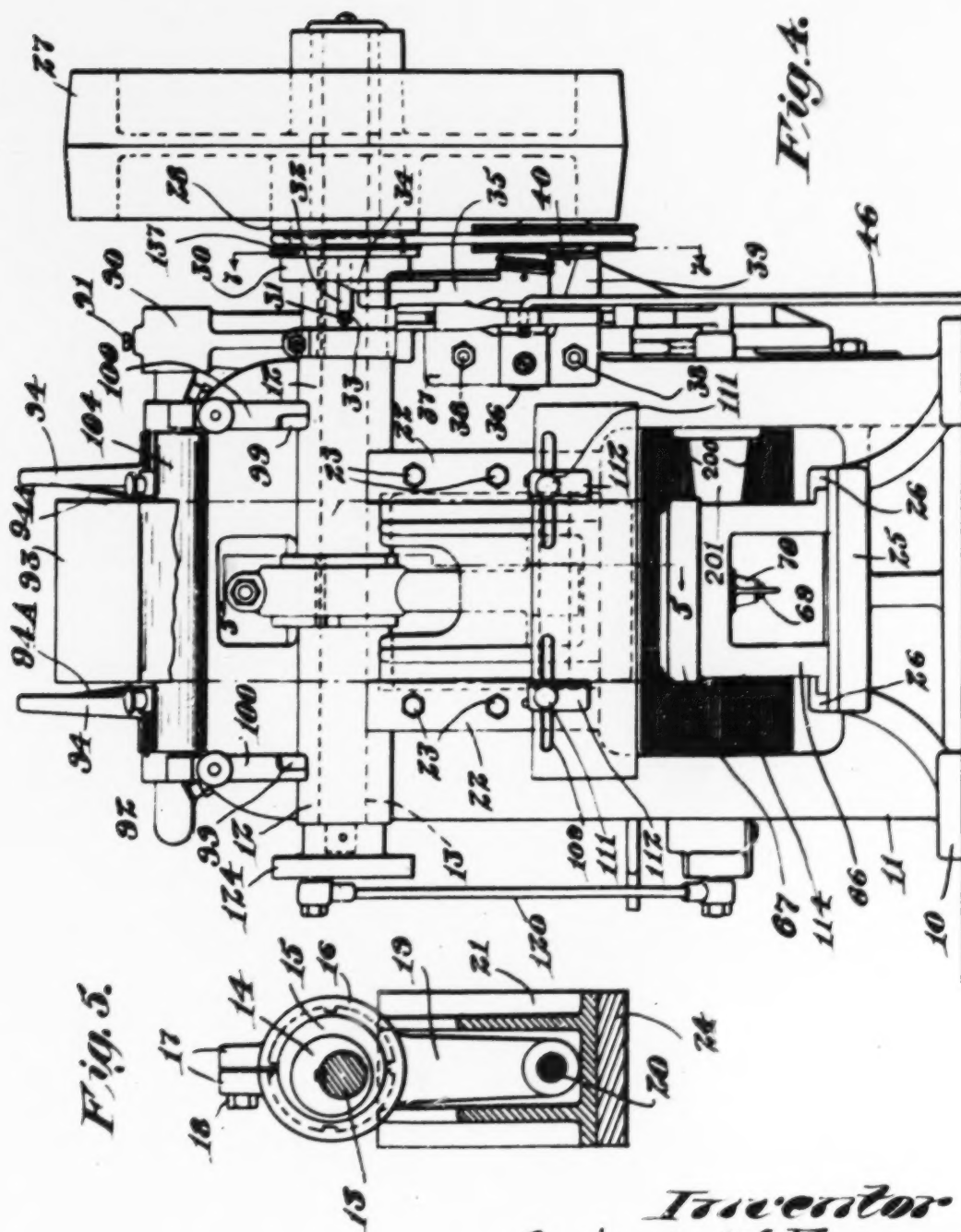
B. W. FREEMAN

1,681,033

CUT OUT MACHINE FOR SHOE UPPERS

Filed Dec. 3, 1923

7 Sheets-Sheet 4



Inventor
 Benjamin W. Freeman
 By James R. Hodder
 Attorney

Aug. 14, 1928.

B. W. FREEMAN

1,681,033

CUT OUT MACHINE FOR SHOE UPPERS

Filed Dec. 3, 1923

7 Sheets-Sheet 5

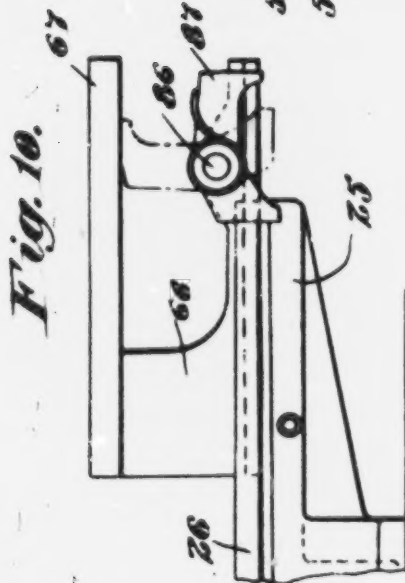
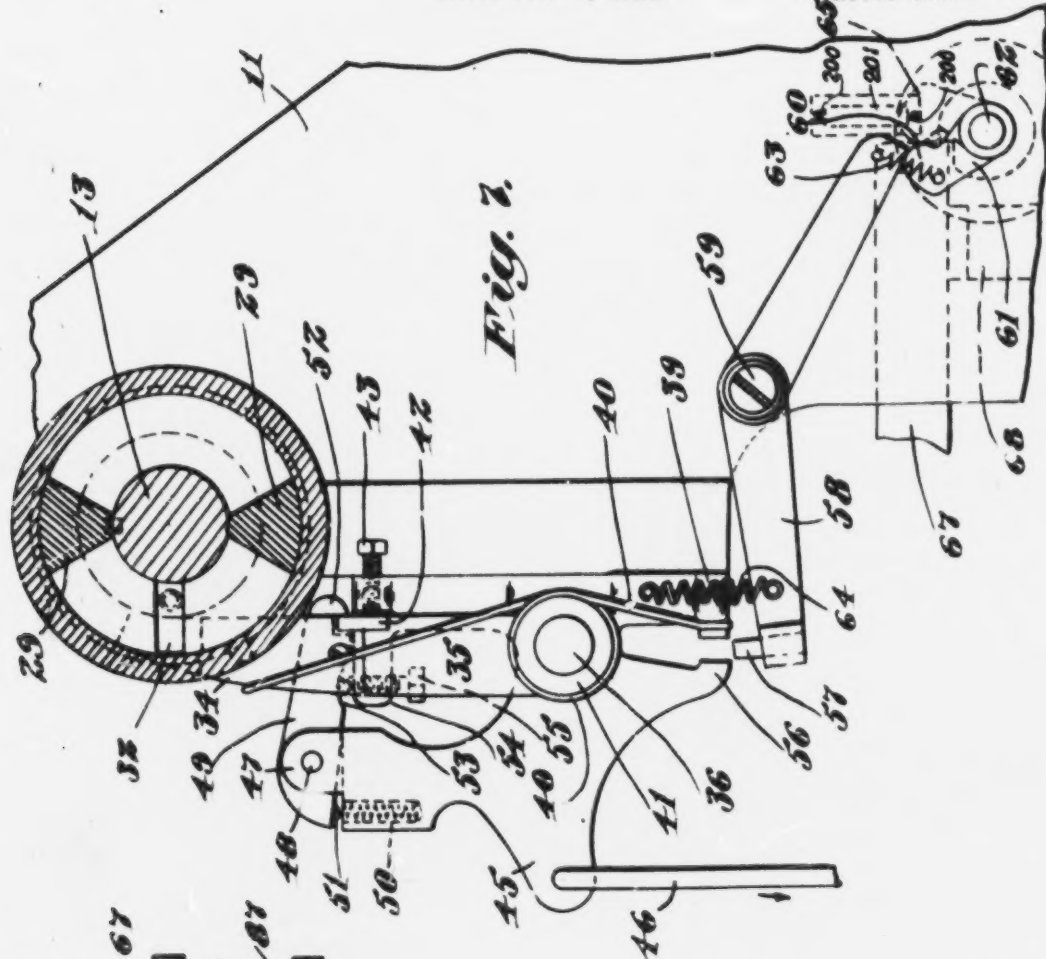


Fig. 8.



Inventor
 Benjamin W. Freeman
 by James R. Hodges
 Attorney

Aug. 14, 1928.

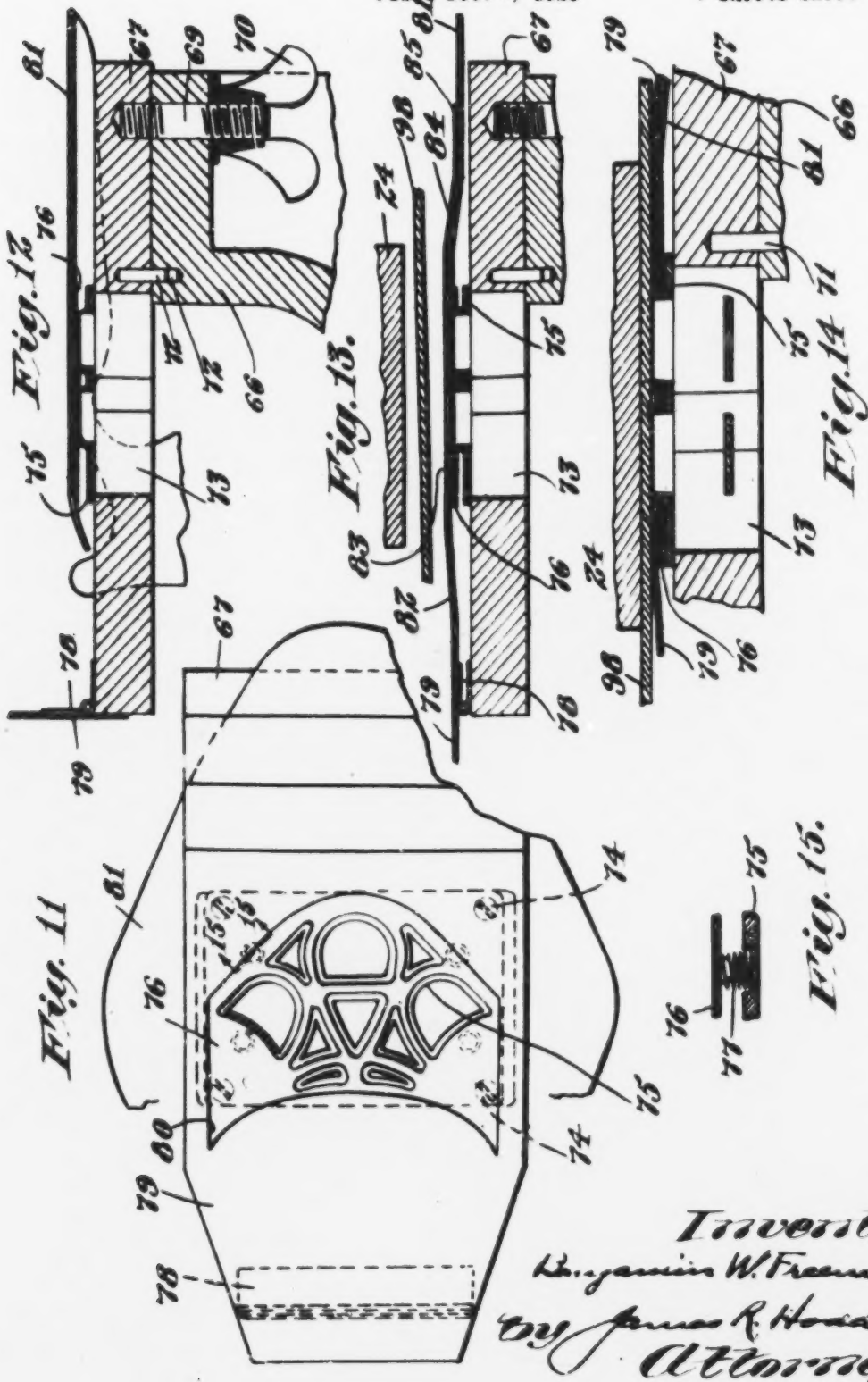
1,681,033

B. W. FREEMAN

CUT OUT MACHINE FOR SHOE UPPERS

Filed Dec. 3, 1923

7 Sheets-Sheet 6



Inventor
B. W. Freeman
by James R. Hodges
Attorney

Aug. 14, 1928.

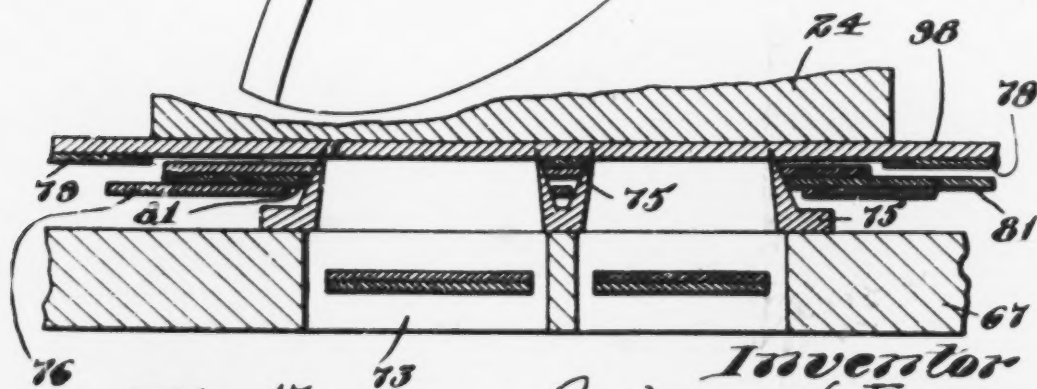
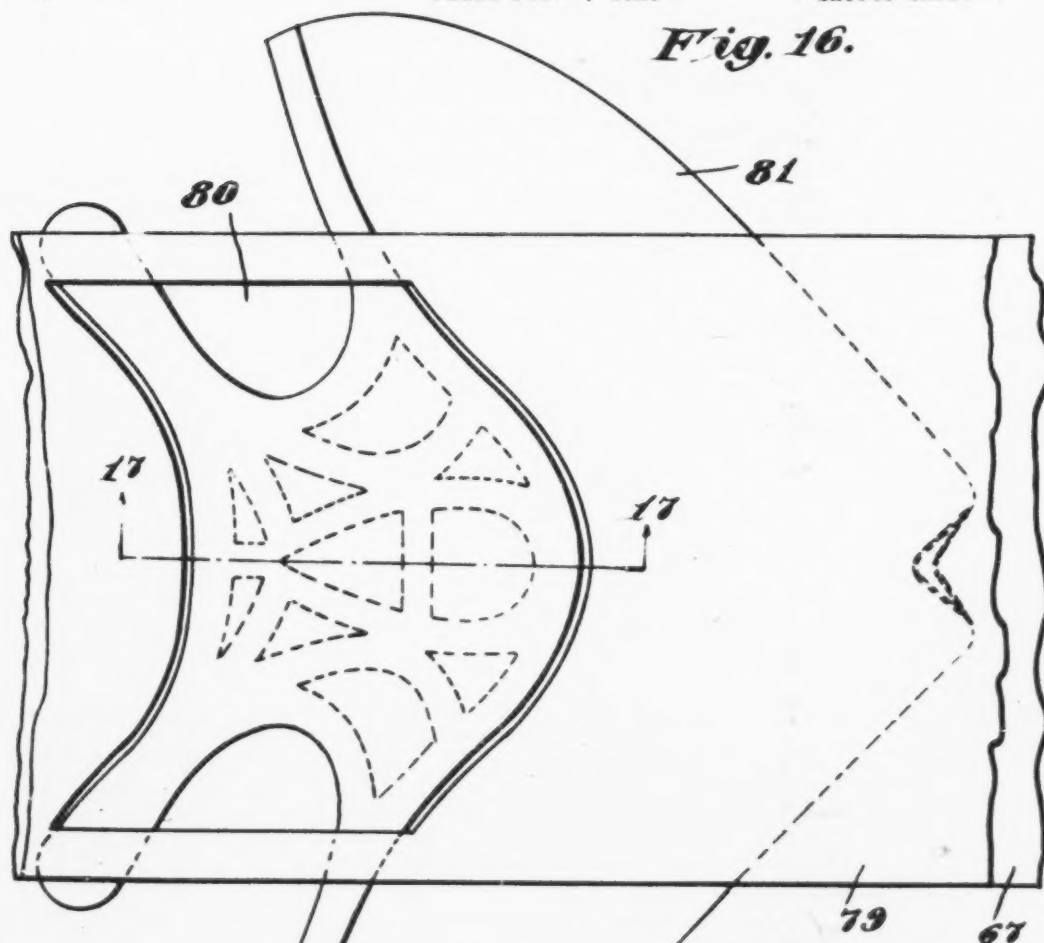
B. W. FREEMAN

1,681,033

CUT OUT MACHINE FOR SHOE UPPERS

Filed Dec. 3, 1923

7 Sheets-Sheet 7

Fig. 16.*Fig. 17.*

Inventor
Benjamin W. Freeman
By James R. Hoadler
Attorney

UNITED STATES PATENT OFFICE.

BENJAMIN W. FREEMAN, OF CINCINNATI, OHIO.

CUT-OUT MACHINE FOR SHOE UPPERS.

Application filed December 3, 1923. Serial No. 678,213.

REISSUED

My present invention is a machine for use in the manufacture of boots and shoes, and particularly for forming the openwork or cut out sections in shoe uppers, as well as being utilized for all stamping work, perforating, ornamentation or the like, in connection with press machines.

In presses or machines as heretofore made, it has been possible to operate only upon relatively small portions of flat material, such for example as cutting out toe tips, perforating and ornamenting sections or small portions of shoe uppers or the like, while my present machine is adapted to perform all of these operations and in addition thereto to perform cutting out operations heretofore impossible in machines capable only for flat press work. My present machine, therefore, is intended for use as a "universal" cutting out press, particularly intended for work on shoes, leather and shoe materials, and where the work is of widely varying contour and design.

In the present manufacture of openwork shoes, slippers, pumps and the like, particularly those intended for ladies' wear, it has been customary to first mark and then to cut out on a flat press the openwork portion of the vamp, quarter, foxing or the like before incorporating the same into the shoe upper and usually prior to uniting the cut out portion to any other portion of the upper. Then it was necessary to leave the linings of the shoe adjacent the cut out machine intact in order to prevent the distortion of the openwork portion during lasting. Then after the shoe was otherwise completed, it was necessary to cut out these linings by hand, and ink and finish the edges, etc., all this prior work requiring repeated handlings by skilled operators of each and every portion of the openwork shoe, cutting the same out with a hand tool, and resulting in unsatisfactory work, spoiled uppers and lack of uniformity in out-put.

My present invention is intended to obviate the difficulties above noted in manufacturing openwork shoes, and enables these shoes to be made by a new process, as explained in the patent granted to B. B. Brodfehrer No. 1,605,916, dated November 9, 1926; and my Patent No. 1,675,295, granted to me June 26, 1928.

The machine of my present invention is directed to perform the cutting out opera-

tions for openwork shoes, following any design desired, as a machine action, and furthermore as a machine operation either before or after the shoe upper portions,—vamp, foxing, quarters, tip, etc.—are united and united into the complete shoe upper, and preferably also with the thus completed shoe upper united at the heel, thus forming the "closed" article, open only at top and bottom. There are numerous advantages and economies in being able to stitch the upper, vamp, quarters, foxings, etc., together, as is now customary, and to unite the same at the heel, in order to have the shoe upper otherwise all ready for assembling on a last—as explained in my said Patent 1,675,295 copending application Ser. No. 677,319, filed November 27, 1923, but no machine heretofore made, so far as I am aware, has been capable of operating on such a closed upper to cut out the portions necessary to form the openwork part of the same. My present machine performs this cutting out operation and an important feature of the same is that it will operate with equal facility upon the sides of the upper, particularly a closed upper, upon the quarter sections, through the vamp, foxing, tongue portion, or tip. I am enabled to perform these operations by having provided means which will enable any portion or portions of the work, upper or other material to be presented, while held flat and preferably while held under tension, and to provide ample spaces or clearance for those portions of the material not being acted on by the cutting devices. A most important feature of the entire machine is in this provision of protecting spaces or clearance, guarding and protecting that portion of the work not desired to be cut, and yet enabling the openwork portion which is to be formed, to be quickly, accurately and removably presented to the cutting devices. Furthermore, this provision of the clearance, space, and protecting recesses for portions of the work is of ample area to facilitate the operator adjusting and holding the work, not only when positioning the same, but during the cutting operation, if desired, independently or in addition to a holddown or mask, as will be hereinafter explained. This feature is of great importance, and being distinctly new, I claim the same broadly herein.

A further important feature consists in

the provision of a machine and operating instrumentalities which will enable the openwork designs or formations to be cut out entirely through the upper or upper and lining and without previously marking or forming any pattern on the work. This desirable result I accomplish by the provision of work cutting and work holding means which will enable the cutting devices to be alined or positioned with regard to a fixed edge or portion of the shoe upper itself; thus insuring the cutting out action with exact uniformity upon successive uppers of similar design. This feature is most important in practice, as the cutting out action leaves a plurality of narrow strips or straps and the spacing or width of these straps is most important. By means of my invention, wherein the straps are formed with exact relation to the edge or predetermined portion of the shoe upper, such as the top seam, side stitching or other fixed portion in the design, the resulting openwork is formed accurately with all straps, widths and strips of proper width, and with opposite quarter sections, for example, in perfect cooperation. This is an important advantage resulting from cutting out the openwork portions after the shoe upper sections have been stitched and united, as distinguished from first cutting out the upper sections and then stitching and uniting same.

An additional feature in the present machine is that I have devised, invented and developed a novel type of combined anvil and cutting device, which I have termed a cutting anvil. In a machine of this type, it will be appreciated that it is necessary to have a capacity for constant change, variations and differences in design of the cut out portion, particularly when shoe uppers are being operated upon. Therefore it is essential that interchangeable cutting devices be provided and I have devised in connection with the cutting devices an anvil on which the material is cut and permitting a ready interchange of designs and devices. Also it is desirable and in many instances it is essential that the material be held or clamped in fixed predetermined position, and therefore I have combined, in my cutting anvil, the cutting devices, an anvil-like member on which the work is held, together with clamping means, all constituting a complete, self-contained unit, viz, my cutting anvil, which unit, furthermore, is interchangeable with others for operation in the same machine. Therefore my present invention includes means capable of instantly changing the machine from cutting one design or pattern, to an entirely different design or pattern, by the same interchangeability and adjustability of cutting anvils. Each cutting anvil has preferably, both the cutting devices for forming the

cut out or openwork portions, together with a cooperating clamping member, adapted to hold the work firmly in position for the cutting out operation.

A still further feature and one of great importance, consists in the fact that I utilize the clamping means either alone or as a combined clamp or holder for the work, and preferably as a guiding, or gauging, or alining device, to insure that the cutting means and work will register. This enables me to eliminate entirely any marking or previously stencilling a design on the upper, before it is cut, as I can rely entirely upon the combined gauging and holding or clamping member to adjust the work relatively therewith, and the resulting cutting out operation insures perfect registering and alining of the design cut out, as, for example, with the fixed edges of a shoe upper. This feature in practice gives the important advantage of enabling the operator to speed up work on this machine, to quickly and accurately aline the work with regard to the clamp, because the latter is outside and on top of the work, while the cutting devices are underneath and out of sight. The operator need only position the work with regard to the topmost portion of the cutting anvil, viz, the clamp, and then at once position the same under a moving part such as a plunger and the tripping of a treadle will complete the cutting out action.

The clamping device as above noted constitutes also a protecting guard for that portion of the work adjacent the cutting out devices, during the cutting operation, and furthermore I form this clamp as a complete guard partly or entirely around the cut-out portion. Thus I hold the part of the work to be cut out, not merely at one or two points, but partly or entirely around the openwork portion to be formed, the clamp being cut out proportionately or in cooperation with the design of the openwork and protecting, as well as holding the material being operated upon. This clamp is preferably made of thin sheet metal, and preferably also is hinged or otherwise removably attached to the cutting anvil as above explained, and is so constructed and arranged as to place the work under proper tension to prevent displacement of same during the cutting out operation. My improved clamp, which I have designated as a "mask," is of great importance in the operation of cutting out, perforating, or ornamenting parts or portions of material. Heretofore great difficulty has been experienced in operating upon such articles as vamps, toe flaps, or the like, in flat bed cutting machines, as the material would wrinkle, would not lie evenly, and no prior clamping or holding devices of which I am aware, extended closely adjacent the line of pressure of such prior

machines, except only at the immediate front of the machine. My invention of a holding, protecting, and also gauging mask, performs the very important and vital function of clamping the material to be operated upon, sufficiently along the side or sides of the cutting or ornamenting action and preferably partly or even entirely around the portion to be operated upon. Therefore, by extending my mask or clamping action beyond the former line of holding and partly surrounding the cut out or ornamented portion, I have eliminated prior difficulties, and am thus enabled to operate upon flat bed work much more advantageously than was formerly possible. In addition to this feature, my mask, clamp or guard in any form and in combination with protecting spaces, recesses or clearance, as herein explained, is new, and is claimed broadly herein. This clamp also, being of thin sheet metal, when adapted to press down upon a completed shoe upper, can easily have extra portions cut out, for any purpose as at the tip seam or other place where there is an extra mass or thickness of material, and thereby prevent damage to the same, eliminate breaking of stitching, marring of patent leather, tearing strain on satin, suede or other material of which the upper is made.

Positioned and arranged under the protecting guard or mask I provide a yieldable element, cooperating with the portion of the material adjacent the sections to be cut out, to yield with the pressure or the plunger during the cutting out action, and acting as a "stripper" element, during the release of the pressure and to lift and restore the uncut part of the work above the cutting dies. This stripper element may be any yieldable member, such as a steel plate mounted on a plurality of springs and having a form or contour substantially corresponding to the design of the cut-out die and resulting cut out portions on the work. While I preferably utilize a metallic yielding strip, any yielding element such as rubber or the like can be employed for this yielding and stripping action.

In addition to the fundamental features above noted, I have provided means which will insure the accurate operation of the cutting out action. I have incorporated my invention, as shown in the accompanying drawings, in a machine having a movable plunger to act upon the work, and through a yielding medium, such as a heavy paper or the like, pressing through the paper and upon the work through the open portion of the clamp, pressing the work downwardly past the cutting devices on the anvil, permitting the cutting devices to penetrate the paper and thus insure a clean, clear cut entirely through the work. In order to insure an equal cutting throughout the entire

extent of variations in design of cutting devices, I have arranged the pressure device, plunger or other moving member, and the position of the cutting devices, in a substantially balanced relation, so that the line of pressure of the plunger cooperating with the plunger resisting means will always be equally or substantially equally distributed throughout its action on the cutting edges, irrespective of the variations in contour of the cutting edges, which latter are formed of differing designs particularly for the openwork portions of a shoe. I accomplish this by having the supporting means or cutting anvils so positioned and arranged relatively with the line of pressure of the cutting operation; and the design carried by each anvil, that the supporting means, when the work or shoe upper is positioned thereon, and moved under the plunger, will cooperate with a fixed stop so as to bring the particular design carried by that supporting means, under the same central line of pressure, or balanced relationship with the plunger, as is necessary for equal cutting pressure. The feature of having the work firmly, rigidly and properly supported to resist the line of pressure of the cutting out action, is of very great importance in this type of machine, because of the difficulty of cutting through leather, through leather and canvas, through a shoe upper and only partly into the paper backing, and also because of the peculiar configuration and difficulty of supporting many of the cut out dies, especially when in curved or intricate designs. In order to prevent "springing" or distortion of the dies, and to insure uniformity of successive cut outs for each pair of shoes, and each shoe upper with the same design, the dies must be rigidly supported and directly under the line of pressure during the cutting out operation. To insure the accurate cutting out operation, and to carry out the "balanced" position as above explained, while also affording the clearance desirable for permitting this machine cutting operation, I support the die on a firm, rigid anvil or other equivalent work support, so that the line of pressure will be rigidly resisted and all "springing" and distortion of the dies prevented. In the particular form of die and supporting member, anvil or slide which I utilize in the present case, and wherein one portion of the die holder projects or overhangs same, to facilitate the fitting of a closed upper therearound, I provide a cooperating supporting post, so that the die will be rigidly positioned, and the pressure from the plunger firmly resisted, thereby insuring the smooth and uniform cutting action of the dies, which is the important result desired. This gives long life to the cutting edges, insures equally clean cut edges for any design, and

insures a uniform and satisfactory operation of the machine.

An additional feature in the machine of my present invention and as shown in the accompanying drawings, consists in the fact of extra safety devices. Thus I have provided mechanism automatically actuated, which will prevent the starting of the machine, until the cutting anvil is in exact and predetermined position under the plunger. This automatic safety device comprises a dog or plunger which must be moved by the cutting anvil itself during the last portion of its positioning action, to thereby operate through mechanical levers or the like, to release means normally preventing the starting of the machine. Thus the operator cannot actuate the foot treadle and start the clutch and the machine until the die is accurately positioned, thereby preventing danger or damage from the plunger striking any part of the die or work, to cause breakage or damage.

Additional novel features consist in the supporting devices for the cutting anvil, to permit great pressure thereon, and yet to prevent distortion or "springing" providing a firm and balanced pressure-resisting support in combination with the clearance desired; novel clutch means, insuring the accurate operation of the plunger, anvil and reversible supports for the cutting anvil; and other novel means, combinations of parts, and important advantages.

Referring to the drawings, illustrating preferred embodiments of my present invention,

Fig. 1 is an elevation of the left side of the machine;

Fig. 2 is an elevation of the right side of the machine;

Fig. 3 is a rear elevation of the machine;

Fig. 4 is a front elevation of the machine;

Fig. 5 is a detail sectional elevation on the line 5-5 of Fig. 4;

Fig. 6 is an enlarged detail on the line 6-6 of Fig. 3;

Fig. 7 is a vertical sectional elevation on the line 7-7 of Fig. 4;

Fig. 8 is an enlarged detail of the tripping lever block for the clutch;

Fig. 9 is a vertical sectional elevation on the line 9-9 of Fig. 3;

Fig. 10 is a fragmentary side elevation of the cutting anvil arranged on its carrying block;

Fig. 11 is a plan view of a cutting anvil showing one exemplification of a design to be cut out, for example, on the upper of a shoe;

Fig. 12 is a vertical sectional side elevation of a carrying block with a cutting anvil positioned thereon and with the upper in position to have a design such, for example, as that illustrated in Fig. 11 and stamped

out therefrom, the protecting mask in this figure being shown out of its normal position;

Fig. 13 is a view similar to Fig. 12, but with the mask folded down in position on the upper and with the plunger of the press moving toward the cutting anvil, a strip of heavy paper being positioned between the plunger and the cutting anvil;

Fig. 14 is a view similar to Fig. 13, but with the plunger moved into position with respect to the anvil so as to cut out a design on the shoe upper;

Fig. 15 is a sectional elevation of a fragment of a stripper plate;

Fig. 16 is a plan view showing the mask in position on an upper, and

Fig. 17 is a section on the line 17-17 of Fig. 16.

Referring to the drawings, 10 designates a base having formed integral therewith and extending upwardly therefrom a body 11 of a machine, which machine is adapted to rest on a bench or other support, and rotatably mounted in bearings 12 formed in the body 11 and adjacent to the top thereof is a power shaft 13. Keyed to the shaft 13 intermediate the ends of such shaft and between the bearings 12 is an eccentric 14 on which is rotatably mounted an eccentric ring 15 that is, in turn, adjustably mounted for rotation in an eccentric strap 16, this eccentric strap being split at one end and this end being provided with laterally extending lugs 17. One of these lugs 17 is drilled as a clearance hole for the body of a bolt 18 while the other of the lugs 17 is drilled to receive the threaded end of such bolt 18 and this bolt 18 is utilized, in connection with the lug 17, as a means for drawing the split end of the eccentric strap together in order to clamp the eccentric ring 15 therein. This eccentric strap 16 is formed integral with one end of a connecting rod 19, the other end of this connecting rod being pivotally attached to a shaft 20 secured in the lower end of a cross-head 21. This crosshead 21 is slidably mounted for vertical movement in guideways formed on the machine by means of straps 22, these straps being secured to the machine by bolts 23. The plunger 21 is provided on its lower end with a removable face 24. Formed integral with the body 10 and extending forwardly therefrom is a table or platen 25, which platen is provided on its upper face and on either side thereof with guideways 26 for a purpose to be hereinafter described. The platen 25 lies in the path of movement of the vertically movable plunger 21.

Rotatably mounted on the main shaft 13 and at one end thereof is a driving pulley 27, power being furnished from any suitable source to such pulley 27 to drive the machine. The inner face of the hub 28 of the

driving pulley 27 is counterbored and secured to the bottom of such counterbored portion is a member provided on the face thereof adjacent the opening of the counterbored portion with two radially arranged sectors 29, as shown in Fig. 7. Secured to the shaft 13 is a member 30 provided with a longitudinally arranged slot 31. Slidably mounted in the slot 31 is a rectangular plate 32, a spring 33 being arranged between the end of the slot 31 and such plate 32, which spring tends to force the plate 32 to the right, as viewed in Fig. 4, or into such a position as to engage with one or the other of the sectors 29. The plate 32 is provided on its outer edge with a V-shaped slot 9 in which is adapted to fit a wedge-shaped member 34. In the position shown in Fig. 4 with the wedge-shaped member 34 in the slot 9, the plate 32 is held to the left against the tension of the spring 33 and with its outer end out of engagement with the wedge-shaped sectors 29. Under these circumstances, the pulley 27 will be freely rotatable on the shaft 13 and the shaft 13 will remain stationary. If the wedge-shaped member 34 is withdrawn from the V-shaped slot 9, the spring 33 will force the plate 32 to the right, as viewed in Fig. 4, and such plate will be engaged by one or the other of the wedge-shaped sectors 29, thus locking the pulley 27 and the shaft 13 together and this condition will prevail until the wedge-shaped member 34 is replaced in its original position to engage in the wedge-shaped slot 9. The wedge-shaped member 34 is secured to the upper end of an arm 35 rotatably mounted on a shaft 36 secured in a member 37 attached to the body 11 by bolts 38. The member 37 is provided with a projection 39 which extends upwardly toward the pulley 27 and secured to the end of this projection is one end of a spring 40, which spring is coiled around the hub 41 of the arm 35 and extends upwardly, its upper end entering a perforation near the upper end of the arm 35, as clearly shown in Figs. 4 and 7. This spring 40 is arranged to cause a rotative movement of the arm 35 about the shaft 36 in a clockwise direction, as viewed in Fig. 7, so that, normally, such arm 35 will maintain the plate 32 in its left hand position as viewed in Fig. 4 against the tension of the spring 30 and therefore the pulley 27 is free to rotate on the shaft 13. Secured to the front edge of the arm 35 in any suitable manner is a plate 42. Engaging such plate is an adjusting screw or bolt 43 that is threaded through a lug 44 formed integral with the body member 11, such adjusting screw or bolt 43 being utilized to adjust the inward or right hand movement of the arm 35 about the shaft 36. Rotatably mounted on the shaft 36 is a member 45. Pivotaly mounted on said member 45 is the upper end

of a treadle rod 46 which extends downwardly to a point adjacent the floor and is provided with an operating treadle (not shown) for the convenience of the operator. Formed on the member 45 at its upper end are lugs or ears 47 in which is pivotaly mounted on a pin 48 the latch member 49. The member 45 is drilled at 50 to receive a coil spring 51, the upper free end of this spring engaging with the rearwardly projecting end of the latch member 49 and tending to rotate such member 49 in a clockwise direction, as viewed in Fig. 7. The end of the latch member 49 remote from the pin 48 is provided with a hook end 52 which engages with the member 42. It is obvious, from an inspection of Fig. 7, that if the treadle rod 46 is pulled downwardly in the direction of the arrows shown, the hook 52 engaging with the plate 42 on the arm 35 will move the upper end of such arm 35 in an anti-clockwise direction and thus tend to pull the wedge-shaped member 34 out from the V-shaped slot 9 in the plate 32, thereby allowing such plate 32 to be moved to the right, as viewed in Fig. 4, under the influence of the spring 33. The under face or edge of the latch member 49 is cut away at 53 to form a cam. Formed integral with the body member 11 and extending outward therefrom is a lug 54 through which is threaded a bolt 55 and the upper end of such bolt 55 engages with the cam surface 53, as clearly shown in Fig. 7. The cam surface 53 is so arranged relative to the screw 55 that, as the latch member 49 moves to the left, as shown in Fig. 7 when the treadle rod 46 is moved downwardly in the direction of the arrow, the hook end 52 will move upwardly about the pin 48 as a center thereby releasing the plate 42 after the wedge-shaped member 34 has been moved from the V-shaped slot 9 in the plate 32. Under these circumstances, it will be apparent that, once the wedge-shaped member 34 has been removed from the V-shaped slot 9, the spring 33 will force the plate 32 to the right and into the path of movement of the wedge-shaped sectors 29 and the spring 40 will move the upper end of the arm 35, and therefore the wedge-shaped member 34, into position whereby the wedge-shaped member 34 will be ready to force itself into the V-shaped slot 9 when the plate 32 has completed one revolution. The above construction, therefore, provides a means for positively allowing but a single revolution of the shaft 13 by power transmitted from the pulley 27.

As a safety means for use in connection with the one revolution clutch above described, I have provided on the member 45 a downwardly and forwardly extending member 56 which lies directly opposite, but spaced apart from, the projection 39 formed

on the member 37. Normally lying between the members 56 and 39 and filling the space therebetween is a plate 57 which is secured to, and extends upwardly from, the end of one arm of a bell crank lever 58, which bell crank lever is rotatably mounted on a shaft 59 secured to the body member 11, as clearly shown in Fig. 7. The other end of the arm of the bell crank lever is engaged by a cam surface 60 formed on an arm 61 secured to a shaft 62 rotatably mounted in the body member 11, a spring 63 secured one end to the arm 61 and the other end to the arm of the bell crank lever 58 holding the cam surface 60 and the end of the arm of the bell crank lever 58 in engagement with each other. Secured to the body member 11 is one end of a coil spring 64, the other end of which is secured to the bell crank lever 58 adjacent the plate 57 and which spring 64 tends to rotate the bell crank lever 58 in a clockwise direction, as viewed in Fig. 7, and forcing the plate 57 upward and into position between the members 56 and 39. Secured to the shaft 62 intermediate the ends thereof is an arm 65, which arm lies above the platen 25, as clearly shown in Fig. 2. Arranged for sliding movement in the guideways 26 on the top of the platen 25 is a base 66 which has secured thereon and at its upper end a cutting anvil 67, the details of which will be later described. As best shown in Figs. 1 and 2, the protecting spaces or clearance at each side of the slide 66 and cutting anvil 67, when the same is in operative position under the plunger, provides a substantial working space for the hands of the operator above the platen 25 and below the plunger face 24 of the machine and at the sides of the work supporting and cutting device to facilitate adjusting and holding of the work without danger of injury to the operator's hands. Adjustably secured to the top of the platen by wing screw 168 is an anvil rest 68, which anvil rest acts as a support for the relatively unsupported end of the cutting anvil 67. Secured to the frame of the machine by screws 200 is a stop plate 201 which lies in the path of movement of the cutting anvil 67 and in such relation thereto that when the cutting anvil 67 engages the stop plate 201, the die 75 on such cutting anvil will be correctly positioned in the line of travel of the plunger 21. The arm 65 is so positioned on the shaft 62 and with relation to the rear end of the cutting anvil 67 that when the anvil 67 is moved to its most rearward position with the base 66 in engagement with the anvil 67, the rear end of such cutting anvil 67 will engage with the arm 65, rotating the shaft 62 and causing the cam surface 60 to engage with the end of one arm of the bell crank lever 58, rotating such bell crank lever in an anti-

clockwise direction, as viewed in Fig. 7, and moving the attached plate 57 downward from between the members 56 and 39. At this instant the end of the cutting anvil 67 comes into engagement with the stop plate 201. When this point is reached, and only when this point is reached, will it be possible for the operator, by pressing on the treadle (not shown), to pull the treadle rod 46 downward and move the wedge-shaped member 34 out from between the projection 33 and the hub 28. Of course, as the member 45 is rotated about the shaft 36, the hook end 52 of the latch member 49 will be released from the arm 35 and the spring 40 will tend to move the arm 35 back into its initial position. With this device, therefore, positive safety is assured in that it is impossible to operate the clutch mechanism until the work holding devices are correctly positioned beneath the plunger 21 and also it is impossible for the operator to allow the shaft 13 to continuously rotate.

Referring now to Figs. 11-17 inclusive wherein are shown the cutting anvil and attached work and mechanism, it will be noted by reference to Fig. 12 that the anvil 67 is removably secured to the base 66 by stud 69 and wing nut 70, a pin 71 secured to the under side of the cutting anvil 67 cooperating with a hole 72 in the upper surface of the base 66 for correctly positioning the cutting anvil 67 on such base. The cutting anvil 67 is perforated at 73 and secured to the upper surface of the anvil by screws 74 is a cutting die 75, the cutting dies being of any shape or form such, for example, as shown in my Patent No. 1,675,295.

Associated with the die structure 75 is a stripper plate 76 and lying between the stripper plate and the die structure 75 are compression springs 77 which tend to hold the stripper plate slightly above the plane in which lies the cutting edge of the die structure 75. Hingedly secured to the rear end of the cutting anvil 67 by hinge 78 is a mask 79. In this mask 79 is cut an opening 80 of such shape as to allow an upper 81 to be accurately positioned on the cutting anvil 67 with respect to the die 75 secured to such anvil. To facilitate the correct positioning of the upper on the cutting anvil 67, the contour of the opening 80, or certain portions of such contour, correspond in size and position, relative to the cutting die 75, with a seam or other fixed portion of the upper 81. With this arrangement, it is possible to correctly position an upper on the cutting anvil and in proper registry with the cutting die 75, even though it is impossible, under the circumstances, to directly observe the relation existing between the cutting die and the upper because of the fact that such cutting die is completely hidden by the upper. The mask 79 is of the

shape, in longitudinal section, as shown in Fig. 13; that is, the left hand portion adjacent the hinge member 78 is engaged by the portions 82 and 83 of the mask. Such portions will hold one end of the upper 81 in approximate position and the complete position of the upper will then take place, after which the operator will pull down the mask 79 into the position shown in Fig. 13 where it will be observed that the front portion of the upper is engaged by the portions 84 and 85. I have described the base 66 as being slidable in the guideways 26 and have shown such a base with the cutting anvil thereon so arranged in the guideways 26 as to have the end of the cutting anvil 67 carrying the hinge 78 come into engagement with the member 65 secured to the shaft 62. It is obvious, therefore, that I may reverse the position of such base 66 in the guideways 26. It will be noted from an inspection of Figs. 2 and 3 that the end of the cutting anvil 67 carrying the hinge 78 rests on top of the stop 68, this for the reason that such stop 68 acts as a support for the free end of such cutting anvil 67 and insures that the cutting anvil 67 will be held perfectly rigid against the shock imparted to it by the plunger 21. When the base 66 is reversed in the guides 26, as shown in Fig. 10, the stop 68 can no longer support the free end of the cutting anvil 67. I have, therefore, on the base 66 pivotally mounted on shaft 86 a stop or support 87 which may be swung into position, as shown in dotted lines, so that, regardless of the manner of positioning the cutting anvil 67 on the platen 25, it will be firmly supported throughout its entire length and width against any shock imparted to it by the plunger 21.

One of the important features of my invention is the provision of means for utilizing a single continuous strip of paper of indeterminate length between the plunger and the cutting die and utilizing practically every portion of such paper. Heretofore in operating cutting dies for cutting out designs on leather and the like, it has been usual and necessary to use a relatively long strip of paper for each cutting operation performed, and as but a very small portion of such strip of paper was used, the waste was considerable. My present device obviates the objections to prior structures and enables me to utilize every available portion of paper in a strip of indeterminate length. Secured to the body member 11 and at one side thereof by bolts 88 is a member 89. Pivotally attached to the rear end of the member 89 on bolt 189 is the lower end of a standard 90. The member 89 is provided with a portion 146 above the pivot bolt 189 and this portion 146 is provided with an arcuate slot 147 through which passes a bolt

148 that screws into the standard 90. By means of the arcuate slot 147 and bolt 148 the standard 90 is capable of limited adjustable movement about the bolt 189 as a center. At the upper end of this standard 90 is secured by setscrew 91 a shaft 92, which shaft lies parallel with the driving shaft 13. On the shaft 92 is adapted to be placed a roll of paper 93 and on the shaft and on each side of the roll of paper 93 are adjustable brackets 94, such brackets being adjustably secured to the shaft 92 by screws 95. Secured to the front of the body member 11 and at the top end thereof is a curved guide plate 96 provided at either side thereof with adjustable guide plates 97 for guiding the edges of the paper 98 fed from the roll 93. The front of the body member 11 below the curved guide plate 96 and on either side of such body member is provided with forwardly extending lugs or ears 99 and to each of such ears 99 is pivotally attached the lower end of a bearing arm 100. Screwed into the front of the body member 11 and extending through a perforation in each of the bearing arms 100 is a thumb screw 101 and located between the head of such thumb screw 101 and the associated bearing arm 100 is a coil spring 102 which tends to force the bearing arms 100 about their pivot point as a center in an anti-clockwise direction. Rotatably mounted at the upper end of the bearing arm 100 is a shaft 103 on which is secured a roller 104, which roller bears against the paper 98 as it passes over and around the curved guide plate 96. Secured to the lower end of each of the guide plates 22 and extending forwardly outward therefrom, as shown in Fig. 1, are studs or rods 105. Numeral 106 designates a curved guide plate over which the paper 98 passes, and secured to the rear face of such guide plate in any suitable manner are lugs 107 spaced apart from each other and drilled to each receive one of the studs or rods 105, acting thereby as a means for positioning the curved guide plate 106 on the machine. The lugs 107 are drilled and tapped to receive the thumb screws 108 and by means of which the curved guide plate 106 may be adjustably mounted on the studs or rods 105. The upper portion of the curved guide plate 106 is provided with a pair of slots 109 in alinement with each other, as clearly shown in Fig. 4, and passing through such slots are studs 110 that are threaded at their outer end to receive a thumb nut 111. The studs 110 and thumb nuts 111 act as means for securely and adjustably positioning on the outer end or face of the curved guide plate 106 the edge of the guides 112 arranged one on either side of the strip of paper 98.

Rotatably mounted in suitable bearings in the body member 11 and lying parallel to the shaft 92 or the drive shaft 13 is a shaft

113 on which is securely mounted a corrugated roller 114. The shaft 113 extends outward beyond the side of the body member 11 and has secured adjacent its extreme outer end a ratchet wheel 115. Rotatably mounted on the shaft 113 is a bracket 116 provided with a longitudinal slot 117 in which is adjustably mounted by bolt and nut 118 and 119 respectively the lower end of a connecting rod 120. Pivotally mounted in the bracket 116 on parallelly arranged spaced shafts 121 are ratchets 122, springs 123 associated one spring with each of the ratchets 122 forcing such ratchets into engagement with the ratchet wheel 115. It will be obvious, from an inspection, for example, of Fig. 6, that an oscillatory movement of the bracket 116 will cause an intermittent or step by step movement of the ratchet wheel 115, and therefore the shaft 113, in the direction of the arrow shown in such figure. Secured to the shaft 13 remote from the driving pulley 27 is a face plate 124 provided with a radial slot 125 in which is adjustably mounted by means of bolt 126 and nut 127 the upper end of the connecting rod 120. The radial slots 117 and 125 make it possible to alter the extent of oscillatory movement of the bracket 116 imparted to it by the intermittent rotary movement of the shaft 13. Pivotally mounted on the body member 11 on each side of said member and above the corrugated wheel 114 are arms 126 and rotatably mounted on such arms in suitable bearings formed therein is a shaft 127, such shaft lying above, and parallel to, the shaft 113. Secured to the shaft 127 is a corrugated feed roll 128 which cooperates with the corrugated feed roll 114 above described. Each of the arms 126 is provided adjacent its free end with an elongated vertical slot 129 through each of which passes a stud 130 that screws into the body member 11, as clearly shown in Fig. 9. Between the under face of the head of the stud 130 and the upper surface of the arm 126 is arranged a coil spring 131 which exerts a downward tension on the arm 126 and tends to hold the corrugated roller 128 in engagement with the corrugated roller 114. The paper 98 is fed between the corrugated rolls 114 and 128, an intermittent rotary motion being imparted to the corrugated roll 114 by the oscillatory movement of the arm 116, and the paper 98 will be fed rearwardly of the machine. Secured between the body member 11 and the bearing arms 126 and located above, and extending transversely of, the paper 98 is a guide rod 132. The paper passes under such guide rod 132 and is led rearwardly of the machine. The portion of the rod 132 directly engaged by the body member 11 and arms 126 is flattened, or non-circular in shape, as clearly shown in Fig.

9 and it will be obvious, therefore, by rotating such rod by means of its handle or eye 145 that the end of the arms 126 will be lifted up, separating the corrugated roll 128 a sufficient distance from the corrugated roll 114 to allow the strip of paper 98 to be threaded therebetween. Formed intermediate the ends of the standard 90 is a bearing 133 in which is rotatably mounted a shaft 134, which shaft lies parallel to the shaft 92 above described. Secured to the end of the shaft 134 by setscrew 135 is a grooved pulley 136. Formed on the hub 28 of the driving pulley 27 is a pulley groove 137 that is in alinement with the groove in the pulley 136 and in the pulley grooves runs a belt 138 and by means of which rotary motion is imparted to the shaft 134 from the drive shaft 13. Screwing into the bearing 133 so as to engage the shaft 134 is a wing screw 139 for a purpose to be hereinafter described. The shaft 134 extends from the bearing 133 parallel to the shaft 92 and this extended portion is greater in diameter than the portion that passes through the bearing 133. This enlarged portion is provided with a longitudinally extending keyway or groove 140. Slidably mounted on the enlarged end of the shaft 134 are collars 141, each provided with a threaded hole to receive a thumb screw 142, the end of which is guided into the keyway or groove 140. By properly adjusting the collars 141 on the enlarged end of the shaft 134, the strip of paper 98 is properly guided, as clearly shown, for example, in Fig. 3. Each of the collars 141 is provided with a hole, the holes being in alinement with each other and through which passes a rod 143, which rod is provided on its end with an eye 144 and by means of which the rod 143 may be handled or operated. The end of the strip of paper 98 is folded over about two inches from its end and placed under the rod 143. By revolving the shaft 134, the end of the paper 98 is started onto the shaft 134. After the paper has been used and wound from the shaft 92 onto the shaft 134, it may be easily removed from the shaft 134 by withdrawing the rod 143. While placing the folded end of the strip of paper under the rod 143 and while adjustably securing the collars 141 in position, the wing setscrew 139 is utilized to hold the shaft 134 against rotation.

The operation of my improved apparatus is as follows, it being assumed that such apparatus is constructed as above described. An appropriate cutting anvil 67 having secured thereon a cutting die 75 in which is fashioned the particular design desired to be cut from the material is provided. It is assumed that the design on the die 75 is that shown in Figs. 16 and 17 or may be that shown in Fig. 11. A mask 79 is provided with an appropriate cut out 80 of

such shape as to allow the seam or other fixed or finished part on the upper to be clearly viewed through such opening and the seam properly centered with respect to the design on the die. This mask 79, to hold, to guard, guide, and protect the work is attached to the cutting anvil 67 by the hinge 78. The stop block 68 is now positioned on the platen 25 in such manner that the die 75 attached to the cutting anvil 67 will be located beneath the plunger 21 when the base 66 is in its rearmost position and against the stop plate 201, and resting on the supporting post 68 in balanced relation to the design of the die so that equal pressure will be placed on all parts of the die. A roll 98 of paper 98, such paper being of substantial thickness as compared to the thickness of the material being worked on, is placed on the shaft 92, drawn over and around the curved guide plate 96 and under the guide tension roll 104, the guides 97 secured in position, the paper passed over the curved guide plate 106 rearwardly of the machine between the corrugated rolls 114 and 128, as above described, the end of the paper 98 folded and passed under the rod 143 and around the shaft 134. The horizontal plane in which is located the cutting edge of the die 75 is spaced apart from the horizontal plane in which lies the lower face of the facing 24 attached to the plunger 21 when such plunger is in its lowermost position, a distance less than the thickness of the strip of paper 98. The strip of paper 98 will, therefore, act as a die block against which the cutting edge of the die works and as a new portion of paper is presented to the dies at every stroke of the press, there is, in reality, a new die block brought into association with the die at every stroke of the press. Further, as the strip of paper 98 is never entirely cut through by the cutting die 75, the amount of movement of the strip of paper for each stroke of the plunger of the press need only be sufficient to present a new uncut surface to the die, and, in practice, such movement of the paper 98 need only be approximately one sixteenth of an inch. In addition to the advantage of having practically a new die block presented to the cutting die at each stroke of the plunger, there is the added advantage that but approximately one sixteenth of an inch of paper of the strip 98 is used up at any one stroke of the die instead of the using up of a strip of paper of from six to fifteen inches in length as has heretofore been the custom. It being assumed that the paper 98 is threaded through the machine, the appropriate die and mask fitted on the cutting anvil 67, and the stop block 68 properly adjusted, power may now be thrown onto the machine through the pulley 27.

The operator slides the base 66 back or to the right, as viewed in Fig. 1, throws the mask 79 into an upright position, as viewed in Fig. 12, places an upper 81 into approximate position over the die 75, then swings the mask 79 downward so that the portions 82 and 83 thereof engage with the upper and, by grasping said upper on either side of the cutting anvil 67, the cut out portion 80 may be utilized as a means for registering and centering the seam or other finished part of the upper with respect to the design on the die 75 even though such die 75 is hidden from view by the upper and seam. After properly centering the upper 81, the mask 79 is pulled down into the position shown in Fig. 13. The operator now moves the base 66 with the attached portions thereon in proper position to the left, as shown in Fig. 1, until such base is brought to rest by the stop block 68. Prior to the engagement of the stop block 68 by the base 66, the cutting anvil 67 will engage with the arm 65 on the shaft 62. Such shaft 62 will be rotated and the arm 60 on the outer end thereof will engage with the cam surface on one arm of the bell crank lever 58, moving the other arm downwardly, as viewed in Fig. 7, and withdrawing the member 59 attached to such arm from between the members 56 and 39, as above described. The operator, by now pressing on the treadle (not shown), is able to pull down the treadle rod 46, rotating the member 45 about the shaft 36 and moving the upper end of the member 45 outward, but to the left, as viewed in Fig. 7. The hook end 52 of the latch member 49 engaging with the plate 42 attached to the arm 35 will move the upper end of such arm to the left about the shaft 36, withdrawing the wedge-shaped member 34 from the V-shaped groove 9 in the plate 32. This allows the spring 33 to force the plate 32 to the right, as viewed in Fig. 4, and into the path of movement of the wedge-shaped sectors 29 on the hub 28. Rotary motion is therefore imparted to the shaft 13 which, by means of the eccentrics 14 and 15, will cause a downward movement of the plunger 21, thus bringing the facing 24 on the bottom of such plunger against the paper 98 and forcing the paper 98 into engagement with the cutting die 75. The parts are now in the position shown in Fig. 14 and it will be noted that, while the cutting die 75 has penetrated the strip of paper 98, it has not pierced such paper which, to all outward appearances on one face thereof at least, is intact. As the latch member 49 moved outward, or to the left, as viewed in Fig. 7, the cam surface 53 on the lower edge thereof rides up on the upper end of the cam screw 55, causing a rotative movement of the latch member 49 about the pin 48 and

over the hook end 52 from the plate 42. Immediately such hook end 32 was freed from the plate 42, the spring 40 forces the upper free end of the arm 35 to the right, as viewed in Fig. 7, and moving the wedge-shaped member 34 in position to engage with the V 9 in the plate 32 in such plate was brought into position by the rotative movement of the shaft 13. On engaging with the V slot 9, the wedge-shaped member 34 moved the plate 32 to the left, as viewed in Fig. 4, and uncoupling the shaft 13 from the pulley 27. The upper end of the arm 35 engaging with the plate 32 positively stopped further rotative movement of the shaft 13. This device is, therefore, a positive one revolution clutch, and but one revolution can be imparted to the shaft 13 by one operation of the treadle rod 46 which must, of necessity, be returned to its initial position in order to allow the hook end 52 and the member 49 to again come into engagement with the plate 42.

Rotative movement of the shaft 13 causes, also, rotative movement of the face plate 124 and, therefore, a complete reciprocatory movement of the connecting rod 120 for each complete revolution of the shaft 13. Reciprocatory movement of the connecting rod 120 imparts a reciprocatory movement to the arm 116 and the pawls 122 engaging with the ratchet wheel 115, imparts an intermittent rotary movement to the shaft 113. The corrugated feed roll 114 on the shaft 113 and the corrugated feed roll 128 gripping the paper 98 therebetween, imparts a feeding movement to the left, as viewed in Fig. 1, to such paper. As the slight length of paper 98 is fed to the left, as viewed in Fig. 1, by the feed rolls 114 and 128, which creates a slackness in that length of paper extending from the corrugated rolls to the shaft 134. The belt 138 is rather slack on the pulley 136 and in the pulley groove 137, so slack, in fact, that there is a slippage between the belt 138 and the pulleys so that the shaft 134 constantly tends to pull the strip of paper 98 from the feed rolls 128 and 114. As soon as such slack is created in the length of paper 98 from the feed rolls to the shaft 134, the belt 138 will rotate the shaft 134 sufficient to take up such slack.

The sequence of operations above described may take place indefinitely, the paper 98 being moved step by step across the path of the plunger 21 to present a new uncut surface to the die 75 and the extent of each step by step movement is sufficient for this purpose and is short enough to insure that practically every available bit of paper is used.

While I have necessarily shown and described the preferred embodiment of my invention somewhat in detail, it is to be

understood that I may vary the size, shape, and arrangement of parts within wide limits without departing from the spirit of the invention.

Various modifications within the scope of the invention and the appended claims will readily occur to those skilled in the art. Thus I may reverse the position of the cutters and mount the same on the movable plunger or other pressure applying means; the plunger may be moved either from above downwardly, or from below upwardly; the entire cutting anvil, while preferably in a single unit, including the cutting instrumentalities, stripper plates, cutting and guiding masks, may, of course, be separated into co-operating or interchangeably locked parts. Also while it is an important feature of the present machine to utilize relatively heavy paper through which to perform the cutting action, it is, of course, entirely feasible to employ a soft material, such even as a sheet of brass, composition, rubber or the like suitable cutting surface. Paper is preferred because it does not dull the cutting edges of the die. It will also be appreciated that my machine in addition to the capacity for performing the highly difficult and involved cutting out actions on closed shoe uppers, as herein illustrated and explained, is also capable of performing the more simple cutting out actions, such for example as tip perforating, toe ornamentation, etc., and in fact the cutting devices could be fitted to perform both cutting out and tip perforating simultaneously, as will be readily understood. By means of the construction and arrangement of the cutting anvil and the clearance or space allowing for concealing, protecting and guarding the shoe upper at any point below the plane of the cutting operation by recesses in the top, at the side or underneath the anvil, a substantially universal cutting, perforating and ornamenting machine, particularly suitable for advantageous use in shoe manufacture, is produced, giving a machine of this type suitable for performing all these intricate operations on shoe uppers or parts of the same, which heretofore required separate machines or difficult hand operations. The feature of my work support which is capable of use both in operating upon flat or sheet material, the combination of materials such as is presented in a shoe upper of joined parts, lining, etc., wherein clearance and space is provided around and about the support, preferably below the line of the cutting operation, is of the greatest importance. Particularly is this feature important when operating upon a shoe upper, whether flat, a fitted or partly fitted upper, or a completely fitted and closed upper. That part of the work which is not being operated upon to con-

stitute the cut-out portion, may thus be protected, guarded and held within the recesses, spaces, clearance or room about, under, or partly under the work support, which capacity is one of the important characteristic novelties of my present invention. This feature of the protecting recesses, space and clearance, distinguishes my present invention from all former tip perforating or the like machines, wherein a flat bed or support was utilized, but without any capacity for operating upon any work except flat pieces. As above noted, my machine will do all the operations heretofore performed upon flat bed machines, and in addition thereto, will operate advantageously upon articles having a curved contour such as is presented in shoe uppers. For this latter work I may apply a fitted, partly fitted, or completely fitted and closed upper on the work support, positioned either as shown in the drawings or in reverse direction, and indeed may position the work supporting slide either as shown or in reverse position.

My invention is further described and defined in the form of claims as follows:

1. A machine for ornamenting shoe uppers, having movable work supporting means, pressure applying means, and shoe upper ornamenting means, said machine constructed and arranged to provide a substantial space along lateral sides of the work supporting means and ornamenting means sufficiently large to admit thereto at least one hand to hold the work.

2. A machine of the kind described, having pressure applying means, ornamenting means mounted independent of said pressure applying means and co-operating therewith, means for supporting the ornamenting means, said ornamenting means and said supporting means constructed and arranged to support in a substantially flat position a portion of a shoe upper made up of two or more pieces of flat material attached together such that the combined pieces forming the shoe upper cannot be placed in a flat position, and to allow other portions of the upper to extend about its sides without buckling the portion of the upper to be ornamented.

3. A machine of the kind described, having pressure applying means, ornamenting means, movable means for supporting the ornamenting means, said ornamenting means and supporting means constructed and arranged to support flatwise a portion of a shoe upper made up of two or more pieces of flat material attached in such a manner that the combined pieces cannot be placed flatwise, and to allow other portions of the upper to extend about its side without buckling the portion of the upper to be ornamented.

4. A machine of the kind described, hav-

ing work supporting means, pressure applying means, and shoe ornamenting means mounted independent of said pressure applying means and cooperating therewith, said machine constructed and arranged to provide a substantial work receiving space extending below the plane of the ornamenting action and along lateral sides of the work supporting means and ornamenting means.

5. A machine for cutting out open work patterns in shoe uppers, having a support for work, pressure applying means, and cutting devices having upstanding cutting members for cutting out designs in predetermined portions of the work mounted independent of the pressure applying means and cooperating therewith, said machine constructed and arranged to provide a substantial work receiving recess disaligned from the plane of the cutting action.

6. For use in a machine for cutting designs in shoe uppers, the combination including work supporting means, a work cutting unit with upstanding cutting edges mounted thereon, said work supporting means and work cutting unit constructed with a top portion to support in a substantially flat manner a portion of the shoe upper in which a design is to be cut and with lateral sides so shaped that the upper may be draped thereabouts, without buckling the shoe upper while the design is cut therein.

7. For use in a machine for cutting designs in shoe uppers, the combination including movable die supporting means, a cutting die with upstanding cutting edges mounted thereon, said die and supporting means constructed and arranged to support flatwise without buckling a portion of a shoe upper in which a design is to be cut with another portion of the upper draped about a lateral side of said die and support, and guiding means on said support arranged to cooperate with a guide on a supporting bed whereby the die and support may be guided from a work placing to work operating position.

8. The combination for use in a machine for cutting designs in shoe uppers in which a portion of a shoe upper is supported flatwise with other portions extending in other than flat position, including movable supporting means and cutting devices, said supporting means being constructed with receiving and protecting recesses for that portion of the upper located at either side of said support.

9. A cut-out machine for operating upon boot and shoe uppers, having cutting means and movable work supporting means constructed to support a portion of a closed upper to be cut and to protect a portion of said upper not to be cut.

10. The combination of means for stripping a shoe upper from an ornamenting die, and a shoe upper gauging mask, said mask having position indicating means partially surrounding a portion of an upper being ornamented, whereby said upper may be correctly aligned with said position indicating means.
11. The combination of means for stripping a shoe upper from an ornamenting die and a shoe upper gauging mask, said mask having position indicating means in spaced relationship to that portion of the upper being ornamented.
12. The combination of means for stripping a shoe upper from an ornamenting die and a shoe upper clamping mask, said mask having upper engaging means partially surrounding that portion of the upper being ornamented.
13. The combination for use in a machine for ornamenting parts of boots and shoes, comprising ornamenting means, clamping means, and supporting means upon which said ornamenting and clamping means are mounted, said clamping means constructed to hold a portion of the work and partially surround the ornamenting means.
14. The combination for use in a machine for ornamenting parts of boots and shoes, comprising ornamenting means, means for stripping the work from the ornamenting means, clamping means, supporting means upon which said ornamenting means is mounted, said clamping means constructed to hold a portion of the work and substantially surround the ornamenting means.
15. A support for shoe upper material to be ornamented, comprising a stripping member mounted on said support, and a clamping mask co-operating with said member to hold said material under tension and to partially surround that part of the upper material to be ornamented.
16. A support for shoe upper material to be ornamented, comprising stripping means mounted thereon, and a clamping mask co-operating with said stripping means to hold a portion of shoe upper material under tension, said mask being provided with an edge portion to partially surround that portion of the upper material to be ornamented, said edge portion being shaped to act as a gauge for the positioning of the material beneath the mask.
17. In combination with a cutting die having cutting edges for cutting designs in shoe upper materials, a support for the die and a mask co-operating therewith, said mask constructed with one or more openings to partially surround the cutting edges of the die and adapted to be pressed against the work.
18. In combination with a cutting die having cutting edges for cutting designs in shoe upper material, a support for the die and a mask co-operating therewith, said mask being provided with one or more edge portions to partially surround the cutting edges of the die, said edge or edge portions shaped to act as a gauge for the positioning of the material beneath the mask.
19. A support for shoe upper material and a clamping member co-operating therewith constructed and arranged to provide a preliminary yielding engagement permitting adjustment of the material, and subsequently a firm holding engagement therewith.
20. The combination for use in a machine for cutting designs in shoe upper material having clutch locking mechanism, comprising a cutting die, a movable support for the die, and means for releasing the clutch locking mechanism by the movement of the support.
21. The combination for use in a machine for cutting designs in shoe upper material having clutch locking mechanism, comprising a cutting die, a movable support for the die, and a clamping mask to hold the upper material under tension, and means for releasing the clutch locking mechanism by the movement of the support.
22. The combination for use in a machine for cutting designs in shoe uppers having clutch locking mechanism, comprising a cutting die, a movable support for the die, said support and die constructed and arranged with a flat-wise top portion to support in a substantially flat position a portion of an upper to be cut and with lateral sides about which the upper is draped, preventing buckling of the shoe upper while the design is cut therein, and means for releasing the clutch locking mechanism by the movement of the support.
23. The combination for use in a machine for cutting designs in shoe uppers having clutch locking mechanism, comprising a cutting die, a movable support for the die, means associated with said die and support to act as a gauge for the positioning of the material with relation to the die, and means for releasing the clutch locking mechanism by the movement of the die and support.
24. A machine for cutting open-work patterns in shoe uppers, having cutting means, movable work supporting means, work stripping means mounted on said supporting means, said supporting and stripping means constructed to support flatwise a portion of an upper to be cut out, and shaped to receive the portion of the upper not to be cut in other than flatwise position, and to protect said portion during the cutting out operation.
25. A machine for forming open-work in shoe uppers, comprising cutting means, a movable work holding anvil constructed and

arranged to receive and to act as a gauge for the positioning of a shoe upper, and means co-operating with said anvil and cutting means to effect the cutting out operation.

26. A machine for forming open-work in shoe uppers, comprising a movable cutting anvil constructed to receive and to act as a gauge for the positioning of a shoe upper, and means co-operating with said anvil to effect the cutting out operation.

27. A machine for forming openwork in shoe uppers, having cutting out devices, a support for said devices, means to act as a guide for the positioning of a finished portion of the upper relatively to the cutting out devices, and means on the support for holding the upper thus positioned, one of the sides of said support constructed with an upper receiving opening.

28. A machine adapted for cutting out predetermined portions of shoe upper material, having a base, cutting out devices movable relatively to said base, said devices having cutting edges for piercing the material, and clamping means movable with said devices for holding the material around the cutting edges of the cutting out devices.

29. A machine adapted for cutting out predetermined portions of shoe upper material, having a base, cutting out devices movable relatively to said base, said devices having cutting edges, clamping means pivotally movable with relation to said devices for holding the material partially around the cutting edges of the cutting devices.

30. A machine for forming openwork patterns in shoe uppers, having cutting devices with cutting edges, stripping means associated with said cutting edges, movable work holding means on which said cutting devices are mounted, constructed and arranged to support the shoe upper portions adjacent the part to be cut out, and providing protecting recesses along a lateral side to receive a predetermined part of the upper not to be cut, said work holding means being guided in its movement from work applying position to work cutting position.

31. A machine for cutting out openwork designs in predetermined portions of shoe uppers, having a cutting device with cutting edges, a movable work support adapted to co-operate with the cutting device, protecting recesses adjacent the work support, means to apply pressure to force said cutting edges through a shoe upper, and means for stripping the upper from the cutting edges, said work support being constructed and arranged to resist said pressure applying force.

32. A machine for cutting out predetermined portions of a shoe upper, having

a support, cutting out devices mounted thereon, combined clamping and position indicating means mounted on said support constructed to act as a guide in positioning the work relatively to the cutting devices and to simultaneously hold the work in position.

33. A machine for cutting out predetermined portions of a shoe upper, having, in combination, a movable work support, a cutting die mounted thereon, and means co-operating with the work support and with work supported thereon to act as a gauge in correctly positioning flatwise with relation to the cutting die, that portion of the work to be cut, said support having recesses to receive a portion of the work in other than said flatwise position.

34. A machine for cutting out predetermined portions of a shoe upper, having, in combination, a plunger, a work support, a cutting die mounted independent of the plunger, and means co-operating with the work support and with work supported thereon to act as a gauge in positioning substantially flatwise with relation to the cutting die, that portion of the work to be cut, said support having recesses to receive a portion of the work in other than a flat position.

35. A machine for cutting out predetermined portions of a shoe upper, having, in combination, an auxiliary support, a work support movable into and out of engagement with said auxiliary support, a cutting die positioned on the movable work support, and means co-operating with the movable work support and with work supported thereon to act as a guide in positioning the work with relation to the cutting die.

36. A machine of the kind described, comprising work supporting means, cutting devices having cutting edges, pressure applying means, and backing material toward which the cutting edges are directed, said machine providing, for a portion of the work, substantial work receiving spaces disaligned from the plane of operation.

37. A machine of the kind described, comprising work supporting means, cutting devices having cutting edges, pressure applying means, backing material toward which the cutting edges are directed, and means to impart movement to the backing material, said machine providing, for a portion of the work, substantial work receiving spaces disaligned from the plane of operation.

38. In a machine for cutting out designs in shoe upper material having pressure applying means, a support, a cutting die having cutting edges and mounted on said support, a clamping mask attached to said support to hold work on said support and partially surrounding the cutting edges of

the die, and backing material toward which the cutting die is directed during the cutting out operation.

39. A machine for cutting out openwork patterns in shoe uppers, having, in combination, a pressing member, a work support, a cutting die on said support, said die and support constructed to support a portion of an upper in a substantially flat position and to be moved into and out of the path of movement of said pressing member, means acting as a guide in positioning the work with relation to the cutting die on the support, and backing material interposed between said pressing member and cutting die, said machine having recesses to receive a portion of the upper in other than flat position.

40. A machine for ornamenting shoe upper material, comprising a movable support for shoe upper material, cutting means mounted on said support, a driven element, pressure applying means connected with said driven element, a driving element for said driven element, and safety clutch mechanism provided with means for preventing actuation of the driven element by the driving element until said work support is in operating position.

41. A machine for ornamenting shoe upper material, comprising a movable support for shoe upper material, cutting means mounted on said support, clutch locking means, a driven element, pressure applying means connected with said driven element, a driving element for said driven element, safety clutch mechanism preventing actuation of the driven element by the driving element until released by the clutch locking means, and means associated with the support to release the clutch locking means as it reaches the limit of its movement to operating position.

42. A machine for ornamenting shoe upper material, comprising a movable support for shoe upper material, cutting means mounted on said support, a driven element, pressure applying means connected with said driven element, a driving element for said driven element, clutch mechanism for establishing a driving connection between said driving and driven elements and means effected by said movable support in its movement for inhibiting the operation of said clutch mechanism.

43. In a machine for forming openwork in shoe uppers, the combination with a bed, a pressing member and a cutting out tool, of a work supporting member constructed to support a portion of the upper in a substantially flat position for the cutting out operation, and to receive a portion of the upper in other than said substantially flat position without buckling the portion of the

upper being operated upon, said pressing and work supporting members being constrained to move relatively in two directions normal to each other.

44. In a machine for forming openwork in shoe uppers, the combination with a bed, a pressing member, and a cutting out tool, of a work supporting member provided with a top face upon which one of the quarters of a made upper is positioned flatwise for the cutting out operation, and with an end face having a depression therein in which the opposite quarter of the made upper is positioned during the cutting out operation, said pressing and work supporting members being constrained to move relatively in two directions normal to each other.

45. In a machine for forming openwork in shoe uppers, the combination with a bed and a pressing member, of a work supporting member on said bed provided with a work supporting surface elevated above the bed and constructed to provide spaces below the elevated work supporting surface for at least one hand holding the work on the work supporting member, said pressing and work supporting members being constrained to move relatively in two directions normal to each other.

46. In a machine for forming openwork in shoe uppers, the combination with a bed and a pressing member, a cutting out tool supported other than by the pressing member, of a work supporting member on said bed provided with a work supporting surface elevated above the bed and constructed to provide spaces below the elevated work supporting surface for at least one hand holding the work on the work supporting member.

47. In a machine for forming openwork in shoe uppers, the combination with a bed, a pressing member and a cutting out tool, of a movable anvil guidably mounted on the bed, said anvil constructed to extend within a made shoe upper and support a portion thereof for the cutting out operation.

48. In a machine for forming openwork in shoe uppers, the combination with a bed, a pressing member, and a cutting out tool, of an anvil mounted on the bed having a work supporting surface constructed to extend within a made shoe upper and support a portion of the made shoe upper for the cutting out operation, said work supporting surface and pressing member being constrained to move relatively in two directions normal to each other.

49. A machine for forming openwork in made shoe uppers and in which the uppers are supported in such a manner that uncut portions are in other than flat position, including cutting devices, movable work supporting means so shaped and arranged rela-

tively to other parts of the machine, that recesses are provided to receive uncut portions of the made upper without buckling the portions being operated upon, said recesses being disaligned from the plane of engagement of said cutting devices with said uppers.

50. A machine for forming openwork in shoe uppers and in which the uppers are supported in such a manner that uncut portions of the upper are in other than flat position, including cutting devices, movable work supporting means guided in its movement and so shaped and arranged relatively to other parts of the machine, that recesses are provided to receive uncut portions of the upper disaligned from the plane of engagement of said cutting devices, and including an auxiliary support for the work supporting means when said last mentioned means is in operating position.

51. A machine for forming openwork in shoe uppers and in which the uppers are supported in such a manner that uncut portions of the upper are in other than flat position, including cutting devices, movable work supporting means guided in its movement and so shaped and arranged relatively to other parts of the machine, that recesses are provided to receive uncut portions of the upper disaligned from the plane of engagement of said cutting devices, and provided with means for supplying material having a non-dulling action on the cutting devices, said material being supplied on the side of the work opposite to that engaged by the cutting devices.

52. A machine for forming openwork in shoe uppers and in which the uppers are supported in such a manner that uncut portions of the upper are in other than flat position, including cutting devices, movable work supporting means so shaped and arranged relatively to other parts of the machine that recesses are provided to receive uncut portions of the disaligned uppers from the plane of engagement of said cutting devices, and a clamping mask to hold work on said support.

53. A machine for forming openwork in shoe uppers, and in which the uppers are supported in such a manner that uncut portions of the upper are in other than flat position, including a driven element, a pressing member connected therewith, a driving element, cutting devices, movable work supporting means so shaped and arranged relatively to other parts of the machine that recesses are provided to receive uncut portions of the upper disaligned from the plane of engagement of said cutting devices, and clutch means adapted to engage the driving and driven elements, and means for normally preventing actuation of the clutch.

54. A machine for cutting openwork de-

signs in shoe uppers, said uppers made up of two or more pieces of flat material attached together such that the combined pieces cannot be placed in flat position, comprising a bed, pressure applying means, a work support, a cutting die mounted thereon, said support and die forming an elevated structure supporting in a substantially flat position the portion of the shoe upper to be cut and providing a space for a portion of the upper disaligned from the plane of the cutting action, and not to be cut, thus preventing the buckling of the portion of the upper to be cut, during the cutting operation.

55. A machine for cutting openwork designs in shoe uppers, said uppers made up of two or more pieces of flat material attached together such that the combined pieces cannot be placed in flat position, comprising a bed, pressure applying means, a work support, a cutting die mounted thereon, said support and die forming an elevated structure supporting in a substantially flat position the portion of the shoe upper to be cut and providing a space for a portion of the upper disaligned from the plane of the cutting action, and not to be cut, thus preventing the buckling of the portion of the upper to be cut, during the cutting operation, said support and die being movable from a work placing to work cutting position.

56. A machine for cutting openwork designs in shoe uppers, said uppers made up of two or more pieces of flat material attached together such that the combined pieces cannot be placed in flat position, comprising a bed, pressure applying means, a movable work support, a cutting die mounted thereon, said support and die forming an elevated structure supporting in a substantially flat position the portion of the shoe upper to be cut and providing a space for a portion of the upper disaligned from the plane of the cutting action, and not to be cut, thus preventing the buckling of the portion of the upper to be cut during the cutting operation.

57. In a perforating machine, a base, a presser member, a die having cutting edges to pierce a piece of work placed between the die and the presser member, a fixed guide member extending toward and away from the operator medially located with respect to said base arranged to co-operate with dies of various widths, and a co-operating guide member interposed between the die and the base disposed substantially centrally with respect to the die and movable therewith, constructed and arranged to co-operate with the fixed guide member to maintain the alignment of the die as it is moved forwardly for the positioning of work thereon or rearwardly to bring the work and the die beneath the pressure member.

58. A machine of the kind described, including a frame, work carrying means con-

structed and arranged to support a portion of a closed shoe upper in a substantially flat position, and means permitting guided movement of said work carrying means from receiving position to operating position, said frame and work carrying means forming a receiving space for a portion of the upper extending in other than substantially flat position during said movement.

59. A machine for cutting openwork patterns in shoe uppers comprising a die member having a plurality of sharp edged cutting members having their cutting edges arranged to cut, in an upper, openings having the outline of a selected pattern, a co-operating presser member having a smooth substantially unbroken surface for pressing a piece of work against the sharp edges of said cutting members, and a support for one of said members constructed and arranged to permit one portion of a closed upper to be inserted between said members and stretched smoothly across the supported member without interference with or injury to the portions of the upper not being cut.

60. A machine for cutting openwork patterns in shoe uppers comprising a die member having a plurality of sharp edged cutting members having their cutting edges arranged to cut, in an upper, openings having the outline of a selected pattern, a co-operating presser member having a smooth substantially unbroken surface for pressing a piece of work against the sharp edges of said cutting members, a sheet of relatively soft material interposed between the die and said presser member to prevent injury to the die, and a support for one of said members constructed and arranged to permit one portion of a closed upper to be inserted between said members and stretched smoothly across the supported member without interference with or injury to the portions of the upper not being cut.

61. A machine for cutting openwork patterns in limited portions of shoe uppers which have been stitched to form a ring-like piece of work comprising a frame having a base, a presser member operating in said frame toward and away from the base, a die having upstanding cutting edges forming the pattern to be cut in the upper, the width of said die being limited to a dimension enabling it to be inserted within the ring-like structure of the closed upper, and a member for supporting said die upon the base and having a width substantially like that of the die arranged to elevate said die above the base sufficiently to allow that portion of the upper to be cut to be placed in a flattened condition upon the die while the remainder of the ring-like structure of the upper encircles the sides and end of the supporting member, said supporting member being constructed to extend from the

cutting die to the base of the machine in line with the path of movement of the presser member, thereby to resist the action of the presser member and to insure the rigidity of the support for the die.

62. A cutting anvil for use in a machine for cutting out openwork patterns in shoe uppers, comprising a support, one or more cutting members secured to and projecting from the support, stripping means associated with the cutting members, and guiding means formed upon the lower portion of the support adapted to co-operate with a corresponding guide element in the machine to guide the movement of the anvil as it is transferred from a work placing position to a work cutting position, said anvil being constructed and arranged to support flatwise a portion of the upper to be cut and providing a space for a portion of the upper not to be cut to be draped about a side of said anvil, thus preventing buckling of a portion of the upper to be cut.

63. For use in a machine for cutting designs in shoe upper material having a support, the combination of a cutting die, a base with the die mounted upon the upper portion thereof and having a locating pin and clamping stud extending from the lower portion thereof, said pin formed to project into a hole and said stud into an opening, both the hole and the opening being provided in the support, said pin and stud constructed and arranged to locate and allow the base and die to be clamped on the elevated support, irrespective of the width of the die.

64. For use in a machine for cutting designs in shoe upper material, in which an elevated support is mounted upon the platen of the machine, the combination of a cutting die, a base upon which said die is mounted, locating and clamping means attached to said base and constructed to locate and allow the cutting die and the base to be clamped on the elevated support, irrespective of the width of the die.

65. In a machine for cutting out openwork portions of shoe uppers, an anvil provided at its upper portion with one or more cutting members having upstanding cutting edges, and at its base portion guiding means located substantially centrally of the anvil and adapted to co-operate with complementary guiding means associated with an anvil supporting bed.

66. In a machine for cutting out openwork portions of shoe uppers, an anvil provided at its upper portion with one or more cutting members having upstanding cutting edges, and at its base portion guiding means located substantially centrally of the anvil and adapted to co-operate with complementary guiding means associated with an anvil supporting bed irrespective of the

shape or contour of the upstanding cutting edges of the cutting members.

67. In a machine for cutting out openwork portions of shoe uppers, a movable anvil provided at its upper portion with one or more cutting members having upstanding cutting edges, and at its base portion guiding means located substantially centrally of the anvil and adapted to co-operate with complemental guiding means associated with an anvil supporting bed to guide the movement of the anvil as it is transferred from a work placing position to a work cutting position.

68. In a machine for cutting out openwork portions of shoe uppers, an anvil provided at its upper portion with one or more cutting members having upstanding cutting edges, and at its base portion guiding means located substantially centrally of the anvil and adapted to co-operate with complemental guiding means associated with an anvil supporting bed, and a resilient member arranged about the upstanding cutting edges to strip the upper from the die after the cutting operation.

69. A cutting die for a machine for cutting designs in shoe upper material, comprising a base provided at its upper portion with one or more cutting members having upstanding cutting edges, and at its base portion guiding means located substantially centrally of the die and adapted to co-operate with complemental guiding means associated with a die supporting bed, and a movable plate hinged to said base.

70. In combination, a cutting die provided with cutting edges, a support for said die, a mask for the cutting die mounted on said support, comprising a flat plate adapted to be pressed against the work, said plate being provided with an opening through which the work may be observed and accurately positioned with respect to the cutting edges of the die.

71. In a machine for cutting out designs in shoe uppers formed by uniting two or more flat pieces of material in such manner that the combination of pieces cannot be placed flatwise without buckling a portion of the upper, the combination of a cutting die having cutting edges forming the pattern to be cut in the upper, means to act as a guide in positioning the work with relation to the die, a support for the die, said die and support constructed to support flatwise one portion of the upper and providing clearance for another portion of the upper without buckling the portion of the upper to be cut.

72. In a machine for cutting openwork patterns in shoe uppers which have been stitched to form a closed piece of work, the combination of a cutting die having cutting

edges forming the pattern to be cut in the upper, the width of said die being limited to a width enabling it to be inserted under the portion of the upper to be cut, devices co-operating with said die to act as a gauge to locate that portion of the work to be cut with relation to the cutting die, and supporting means upon which said die is mounted, said means arranged to support said die in an elevated position above the bottom portion of the supporting means sufficiently to allow that portion of the upper to be cut to be placed in a substantially flat position upon the upper surface of the die and supporting means, while remaining portions of the upper extend about the side or sides of the die and supporting means, said die and supporting means being constructed and arranged to provide clearance for the portions of the upper without endangering the rigidity of the supporting means.

73. In a machine for cutting openwork designs in shoe uppers which have been stitched to form a closed piece of work, the combination of a cutting die having cutting edges forming the design to be cut in the upper, devices co-operating with said die to act as a guide in positioning that portion of the work to be cut with relation to the cutting die, supporting means upon which said die is mounted, said means arranged to support said die in an elevated position above the bottom portion of the supporting means sufficiently to allow that portion of the upper to be cut to be placed in a substantially flat position upon the upper surface of the die and supporting means, while remaining portions of the upper extend about the side or sides of the die and supporting means without buckling that portion of the upper supported flatwise.

74. A die for a machine for cutting openwork designs in shoe uppers which have been stitched to form a closed piece of work, comprising one or more cutting members having cutting edges forming the design to be cut in the upper, devices to act as a guide in positioning the work to be cut with relation to the cutting members, supporting means upon which the cutting members are mounted, said means arranged to support said members in an elevated position above the bottom portion of the supporting means sufficiently to allow that portion of the upper to be cut to be placed in a substantially flat position upon the upper surface of the cutting members and supporting means while remaining portions of the upper extend about the side or sides of the die without buckling that portion of the upper supported flatwise and having at its base portion guiding means located substantially centrally of the cutting die and adapted to

co-operate with similarly disposed guiding means on the base of the machine, to guide the movement of the die as it is transferred from a work placing position to a work cutting position.

75. A cutting anvil adapted for use in a machine having an elevated support to cut designs in shoe uppers, comprising one or more cutting members having cutting edges, a block upon which the cutting members are mounted, devices to act as a gauge in positioning the work with relation to the cutting members, and constructed with a top portion to support flatwise a portion of the upper to be cut, and means for mounting the cutting anvil, in an elevated position on the support thereby providing clearance for a portion of the shoe upper not to be cut.

76. A perforating machine comprising a frame having fixed platen guides; a reciprocating platen movable in said guides; a fixed bed arranged in a plane substantially at right angles with the path of the platen, and extending under the latter, and an anvil manually movable on the bed and provided with punches adapted to cooperate with the platen, the bed and anvil being provided with complemental guide elements, adapted and arranged to guide the anvil in a path parallel with the plane of the bed, and permit anvils of different widths to be used interchangeably with the bed, without change or adaptation of the guide elements, the frame, the bed, and the anvil being formed and arranged to provide spaces at the opposite sides of the anvil, and below the upper surface thereof for hands holding the work.

77. A perforating machine comprising a frame having fixed platen guides; a reciprocating platen movable in said guides; a fixed bed arranged in a plane substantially at right angles with the path of the platen, and extending under the latter, and an anvil manually movable on the bed and provided with punches adapted to cooperate with the platen, the bed and anvil being provided with complemental guide elements, adapted and arranged to guide the anvil in a path parallel with the plane of the bed, and permit anvils of different widths to be used interchangeably with the bed, without change or adaptation of the guide elements, the frame, the bed, and the anvil being formed and arranged to provide spaces at the opposite sides of the anvil, and below the upper surface thereof for hands holding the work, the bed and the base of the anvil being each extended laterally in opposite directions from said guiding element.

78. A machine for cutting openwork patterns in shoe uppers, comprising a base, lateral supports extending upwardly from said base, a presser member guided for up

and down movement between said supports, means for operating said presser member constructed and arranged so that there is a substantial space between the lowermost limit of movement of the presser member and the base of the machine sufficient to allow the insertion of the operator's hands, a cutting die, and a narrow central support for elevating said die to a position where it will cooperate with the presser member, said die being slidably mounted with respect to the base of the machine to allow it to be moved forward from beneath the presser member to a position to allow the placing of work thereon by the operator and the return of the die and the piece of work to cutting position beneath the presser member where the lateral edges of the work may be held by the operator without danger of crushing the operator's hands.

79. In combination, a cutting die provided with upwardly extending cutting edges, and a holddown plate provided with one or more apertures to admit the cutting edges of the die, said holddown plate being pivotally attached to the die adjacent to one extremity of the holddown plate.

80. In combination, a cutting die having cutting edges defining a pattern to be cut, a cooperating movable presser member, and a pivoted holddown plate having an opening larger than the pattern to be cut, and arranged to hold a piece of work in position with respect to the die, said holddown plate having means extending to a position out of the range of movement of the presser member whereby an operator may, with safety, depress the holddown against the work.

81. In combination, a cutting die provided with cutting edges, and a holddown plate for the cutting die comprising a flat plate adapted to be pressed against the work, said plate being provided with an opening to surround the cutting edges of the die, one edge of said opening being arranged to act as a gage for the positioning of a piece of work beneath the holddown.

82. In a die press, the combination with a bed, a pressing member and a cutting-out tool, of a work supporting member constructed to support flatwise one of the quarters of a made upper for the cutting-out operation and to receive the opposite quarter out of the way without buckling the quarter operated upon, said pressing and work supporting members being relatively movable in two directions normal to each other.

83. In a die press, the combination with a bed, a pressing member, and a cutting-out tool, of a work supporting member provided with a top face upon which one of the quarters of a made upper is positioned flatwise for the cutting-out operation and with an

end face having a depression therein in which the opposite quarter of the made upper is positioned during the cutting-out operation, said pressing and work supporting members being relatively movable in two directions normal to each other.

84. In a die press the combination with a bed, a pressing member, and a cutting-out tool mounted independent of the pressing member, of a work supporting member provided with a body portion having a rectangular top face, said face having a front edge extending substantially the width of the face and overhanging the body portion of the work supporting member, said overhanging front edge being interposed between the quarters of a made upper during the cutting-out operation.

85. In a die press, the combination with a bed, a pressing member, and a cutting-out tool mounted independent of the pressing member, of a work supporting member provided with a body portion having a rectangular top face, an end face having a deep depression therein, and side faces having shallower depressions therein.

86. In a die press, the combination with a bed and a pressing member, of a work supporting member on said bed provided with a work supporting surface elevated above the bed and constructed to provide spaces below the elevated work supporting surface for at least one hand holding the work on the work supporting member, said pressing and work supporting members being relatively movable in two directions normal to each other.

87. In a die press, the combination with a bed, a pressing member and a cutting-out tool supported other than by the pressing member, of a work supporting member, on said bed, adapted to fit inside of a made shoe upper provided with a work supporting surface, elevated above the bed, upon which the portion of the upper to be operated upon is positioned flatwise, and provided with a depression below the elevated surface in which another portion of the upper may be positioned by at least one hand holding the work on the work support.

88. In a die press, the combination with a bed, a pressing member, a cutting-out tool supported other than by the pressing member, of a work supporting member on said bed, adapted to fit inside of a made shoe upper, provided with a work supporting surface, elevated above the bed, upon which the portion of the made upper to be operated upon is positioned flatwise and also with a deep depression in its front end face and shallower depressions in its side faces below the elevated surface in which depressions other portions of the upper may be positioned by at least one hand holding the work on the work support.

89. In a die press, the combination with a bed and a pressing member, of a work supporting member movable relatively to the bed, a cutting-out tool interposed between the members provided with a cutting edge directed towards one of said members, said pressing member being movable towards the work supporting member to cause the cutting edge of the tool to cut through the work, and a sheet of soft material for protecting the cutting edge of the tool on the member towards which the cutting edge is directed.

90. In a die press, the combination with a bed, a pressing member, and a cutting-out tool, of an anvil movably mounted on the bed constructed to extend within a made shoe upper and support flatwise a portion of the made shoe upper for the cutting out operation.

91. In a die press, the combination with a bed, a pressing member, and a cutting-out tool, of an anvil mounted on the bed having a work supporting surface constructed to extend within a made shoe upper and support flatwise a portion of the made shoe upper for the cutting-out operation, said work supporting surface and pressing member being relatively movable in two directions normal to each other.

92. In a perforating machine, a base, a presser member mounted for movement toward and away from the base, a die interposed between the two having upstanding cutting edges to pierce a piece of work placed between the die and the presser member, said die being mounted for movement toward and away from the operator into and out of the path of movement of the presser member, and means for supporting the die in an elevated position above the base and guiding it with respect thereto, irrespective of the width of the particular die, comprising a supporting member and complementary guide elements disposed substantially centrally of the machine parallel to the path of movement of the die arranged to maintain the alinement of the die with respect to the base as it is moved forward and backward thereon.

93. In a perforating machine, a base, a cutting die provided with cutting faces upon one surface thereof, said die being mounted to slide over said base toward and away from the operator, and an elevating support interposed between the die and the base having its lower surface resting on the base and its upper surface supporting the die, one pair of the contacting surfaces being provided with a projecting tongue and cooperating groove to maintain the alinement of the die irrespective of its width as the die is moved forward and backward with respect to the base.

94. A die for a perforating machine com-

prising a supporting block, said die having one or more cutting members secured to and projecting from said supporting block, and a guide member formed medially upon the under surface of the supporting block so that it will cooperate with a similarly disposed guiding member on the base of the

machine, irrespective of the width of the die, to guide the movement of the die as it is transferred from a work-placing position to a work-cutting position. 10

In testimony, whereof, I have signed my name to this specification.

BENJ. W. FREEMAN.

DISCLAIMER

1,681,033.—*Benjamin W. Freeman*, Cincinnati, Ohio. CUT-OUT MACHINE FOR SHOE UPPERS. Patent dated August 14, 1928. Disclaimer filed November 11, 1936, by the patentee.

Hereby enters this disclaimer to claims 6, 7, 8, 10 to 17 inclusive, 62, 65 to 69 inclusive, 71 to 74 inclusive, 79 and 94 of said Letters Patent.

[*Official Gazette December 15, 1936.*]

[fol. 177a] Mr. Allen: I offer as Exhibit No. 11 copy of reissue patent No. 20,202.

(The said document was marked by the reporter as Plaintiffs' Exhibit No. 11.)

Plaintiffs' Exhibit No. 11 offered in evidence.

[fol. 178] (Plaintiffs' Exhibit 11.)

(Reissue Letters Patent No. 20,202 to B. W. Freeman,
December 8, 1936.)

Dec. 8, 1936.

B. W. FREEMAN

Re. 20,202

CUT-OUT MACHINE FOR SHOE UPPERS

Original Filed Dec. 3, 1923 3 Sheets-Sheet 1

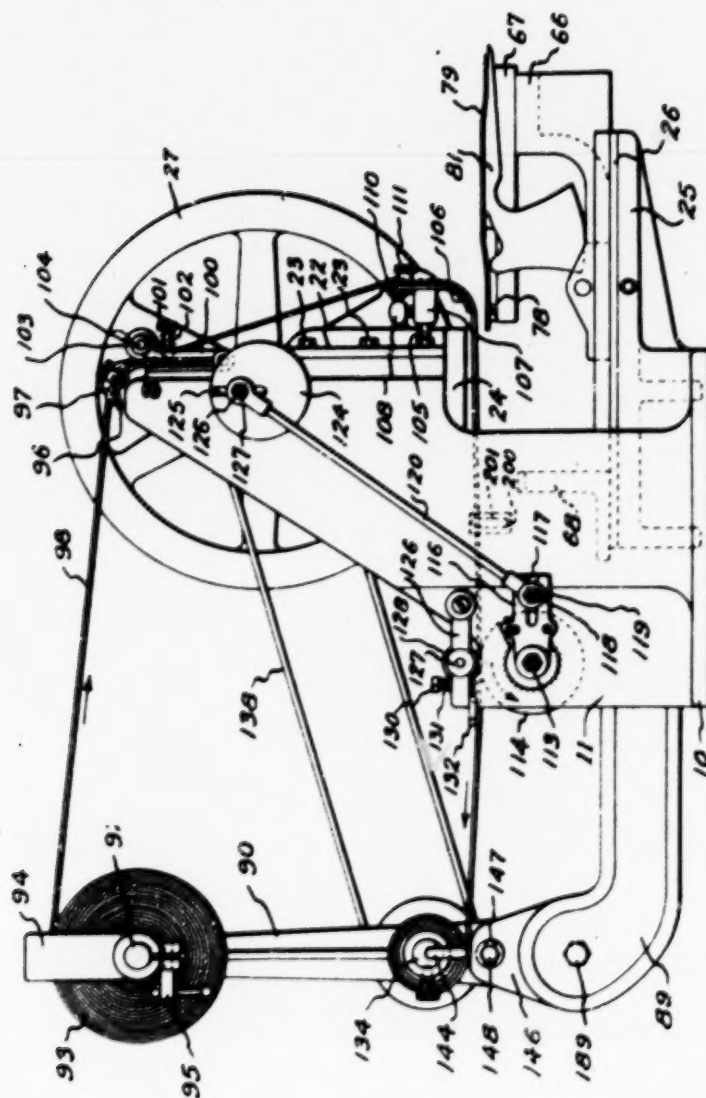


FIG. 1.

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CUT-OUT MACHINE FOR SHOE UPPERS

Original Filed Dec. 3, 1923 3 Sheets-Sheet 1

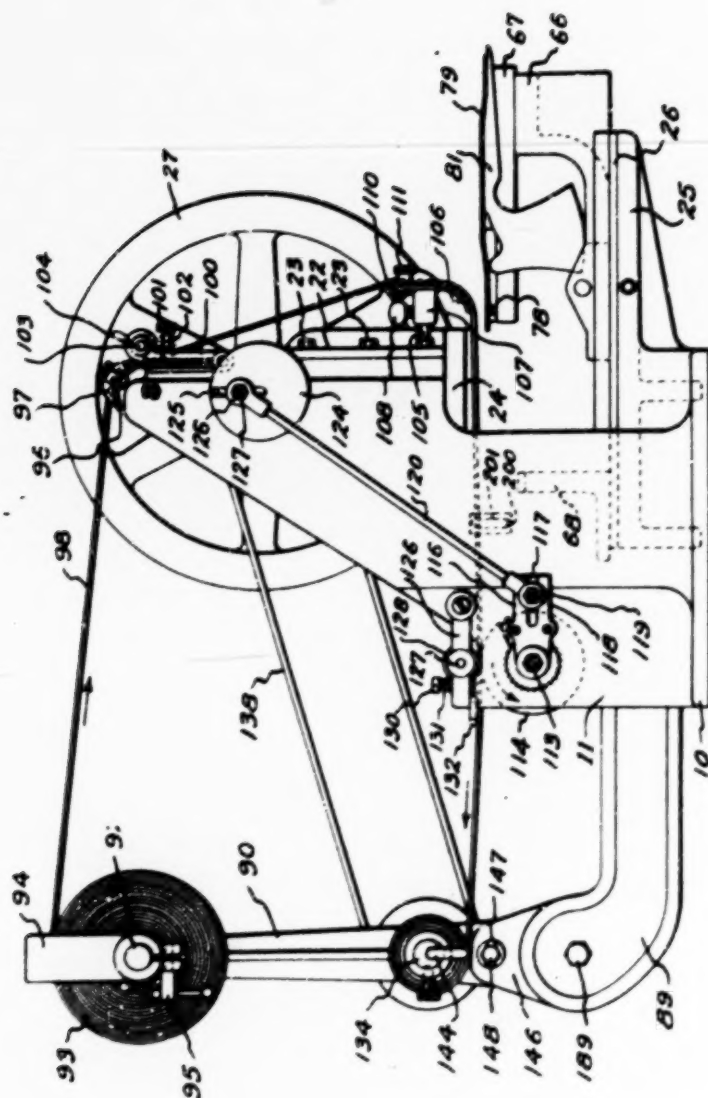


FIG. 1.

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CUT-OUT MACHINE FOR SHOE UPPERS

Original Filed Dec. 3, 1923 3 Sheets-Sheet 2

FIG. 2.

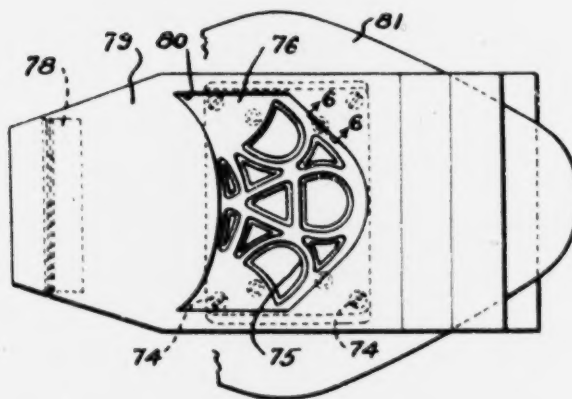


FIG. 3.

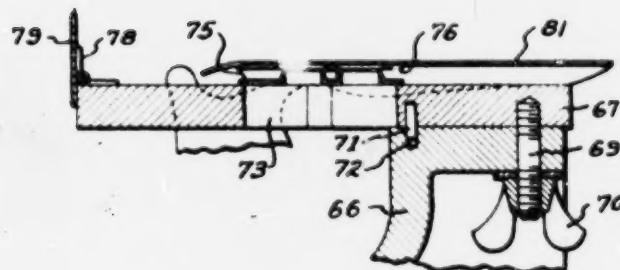


FIG. 4.

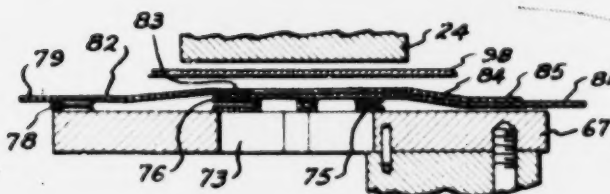


FIG. 5.

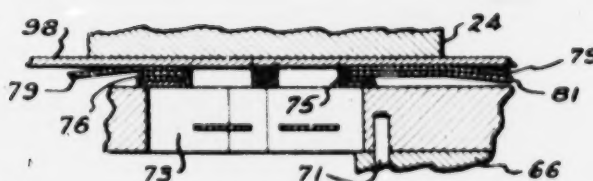


FIG. 6.



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CUT-OUT MACHINE FOR SHOE UPPERS

Original Filed Dec. 3, 1923 3 Sheets-Sheet 3

FIG. 7.

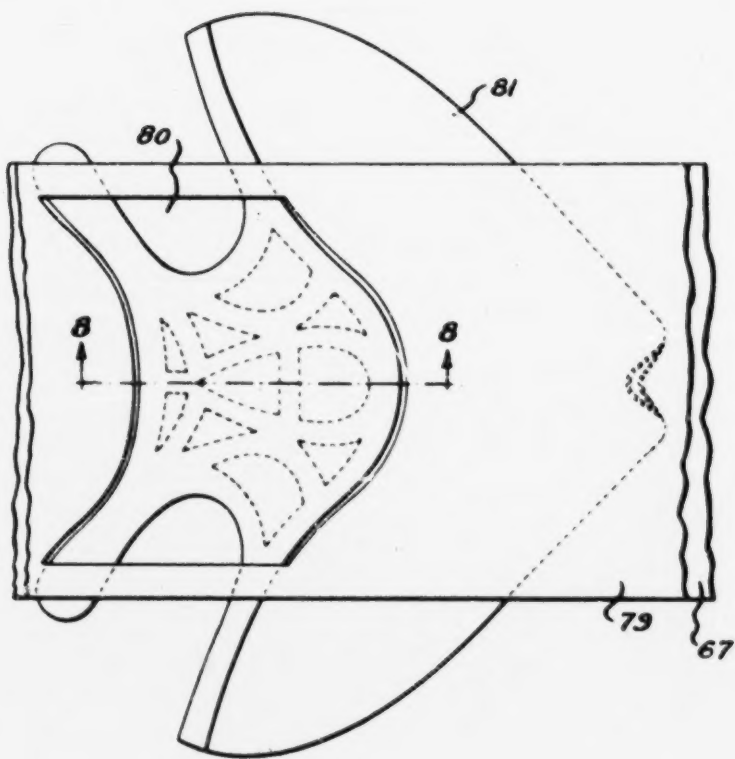
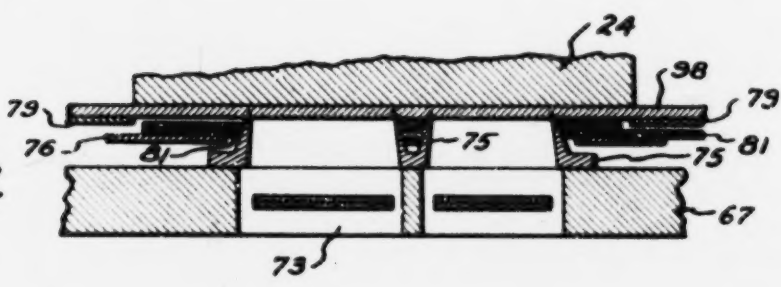


FIG. 8.



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Reissued Dec. 8, 1936

Re. 20,202

UNITED STATES PATENT OFFICE

20,202

CUT-OUT MACHINE FOR SHOE UPPERS

Benjamin W. Freeman, Cincinnati, Ohio

Division A

Division of original No. 1,681,033, dated August 14, 1928, Serial No. 678,213, December 3, 1923.
Application for reissue, October 20, 1936, Serial No. 108,479

9 Claims. (Cl. 164—93)

My present invention is a machine for use in the manufacture of boots and shoes, and particularly for forming the openwork or cut-out sections in shoe uppers, as well as being utilized for all stamping work, perforating, ornamentation or the like, in connection with press machines.

This is a divisional reissue of my Letters Patent 1,681,033 dated August 14, 1928.

The device of this specification is particularly useful in the machine of my said Letters Patent which is directed to perform the cutting out operations for openwork shoes, following any design desired, as a machine action, and furthermore as a machine operation either before or after the shoe upper portions,—vamp, foxing, quarters, tip, etc.,—are united and united into the complete shoe upper, and preferably also with the thus completed shoe upper united at the heel, thus forming the "closed" article, open only at top and bottom. There are numerous advantages and economies in being able to stitch the upper, vamp, quarters, foxings, etc., together, as is now customary, and to unite the same at the heel, in order to have the shoe upper otherwise all ready for assembling on a last—as explained in my Letters Patent 1,675,295; but no machine prior to my own, so far as I am aware, has been capable of operating on such a closed upper to cut out the portions necessary to form the openwork part of the same. My machine performs this cutting out operation and an important feature of the same is that it will operate with equal facility upon the sides of the upper, particularly a closed upper, upon the quarter sections, through the vamp, foxing, tongue portion, or tip. I am enabled to perform these operations by having provided means which will enable any portion or portions of the work, upper or other material to be presented, while held flat and preferably while held under tension, and to provide ample spaces or clearance for those portions of the material not being acted on by the cutting devices.

My invention herein lies in the provision of a machine and operating instrumentalities which will enable the openwork designs or formations to be cut out entirely through the upper or upper and lining and without previously marking or forming any pattern on the work. This desirable result I accomplish by the provision of work cutting and work holding means which will enable the cutting devices to be aligned or positioned with regard to a fixed edge or portion of the shoe upper itself; thus insuring the cutting out action with exact uniformity upon successive uppers of similar design. This feature is most important

in practice, as the cutting out action leaves a plurality of narrow strips or straps and the spacing or width of these straps is most important. By means of my invention, wherein the straps are formed with exact relation to the edge or predetermined portion of the shoe upper, such as the top seam, side stitching or other fixed portion in the design, the resulting openwork is formed accurately with all straps, widths and strips of proper width, and with opposite quarter sections, for example, in perfect cooperation. This is an important advantage resulting from cutting out the openwork portions after the shoe upper sections have been stitched and united, as distinguished from first cutting out the upper sections and then stitching and uniting same.

To this end I utilize a clamping means either alone or as a combined clamp or holder for the work, and preferably as a guiding, or gauging or alining device, to insure that the cutting means and work will register. This enables me to eliminate entirely any marking or previously stencilling a design on the upper, before it is cut, as I can rely entirely upon the combined gauging and holding or clamping member to adjust the work relatively therewith, and the resulting cutting out operation insures perfect registering and alining of the design cut out, as, for example, with the fixed edges of a shoe upper. This feature in practice gives the important advantage of enabling the operator to speed up work on this machine, to quickly and accurately align the work with regard to the clamp, because the latter is outside and on top of the work, while the cutting devices are underneath and out of sight. The operator need only position the work with regard to the topmost portion of the cutting anvil, viz, the clamp, and then at once position the same under a moving part such as a plunger and the tripping of a treadle will complete the cutting out action.

The clamping device as above noted constitutes also a protecting guard for that portion of the work adjacent the cutting out devices, during the cutting operation, and furthermore I form this clamp as a complete guard partly or entirely around the cut-out portion. Thus I hold the part of the work to be cut out, not merely at one or two points, but partly or entirely around the openwork portion to be formed, the clamp being cut out proportionately or in cooperation with the design of the openwork and protecting, as well as holding the material being operated upon. This clamp is preferably made of thin sheet metal, and preferably also is hinged or oth-

erwise removably attached to the cutting anvil as above explained, and is so constructed and arranged as to place the work under proper tension to prevent displacement of same during the cutting out operation. My improved clamp, which I have designated as a "mask", is of great importance in the operation of cutting out, perforating, or ornamenting parts or portions of material. Heretofore great difficulty has been experienced in operating upon such articles as vamps, toe tips, or the like, in flat bed cutting machines, as the material would wrinkle, would not lie evenly, and no prior clamping or holding devices of which I am aware, extended closely adjacent the line of pressure of such prior machines, except only at the immediate front of the machine. My invention of a holding, protecting, and also gauging mask, performs the very important and vital function of clamping the material to be operated upon, sufficiently along the side or sides of the cutting or ornamenting action and preferably partly or even entirely around the portion to be operated upon. Therefore, by extending my mask or clamping action beyond the former line of holding and partly surrounding the cut out or ornamented portion, I have eliminated prior difficulties, and am thus enabled to operate upon flat bed work much more advantageously than was formerly possible. This clamp also, being of thin sheet metal, when adapted to press down upon a completed shoe upper, can easily have extra portions cut out, for any purpose as at the tip seam or other place where there is an extra mass or thickness of material, and thereby prevent damage to the same, eliminate breaking of stitching, marring of patent leather, tearing strain on satin, suede or other material of which the upper is made.

Positioned and arranged under the protecting guard or mask I provide a yieldable element, co-operating with the portion of the material adjacent the sections to be cut out, to yield with the pressure or the plunger during the cutting out action, and acting as a "stripper" element, during the release of the pressure and to lift and restore the uncut part of the work above the cutting dies. This stripper element may be any yieldable member, such as a steel plate mounted on a plurality of springs and having a form or contour substantially corresponding to the design of the cut-out die and resulting cut out portions on the work. While I preferably utilize a metallic yielding strip, any yielding element such as rubber or the like can be employed for this yielding and stripping action.

Referring to the drawings, illustrating preferred embodiments of my present invention.

Fig. 1 is an elevation of the left side of my machine showing an anvil die with mask.

Fig. 2 is a plan view of a cutting anvil showing one exemplification of a design to be cut out, for example, on the upper of a shoe.

Fig. 3 is a vertical sectional side elevation of a carrying block with a cutting anvil positioned thereon and with the upper in position to have a design such, for example, as that illustrated in Fig. 2 and stamped out therefrom, the protecting mask in this figure being shown out of its normal position.

Fig. 4 is a view similar to Fig. 3, but with the mask folded down in position on the upper and with the plunger of the press moving toward the cutting anvil, a strip of heavy paper being positioned between the plunger and cutting anvil.

Fig. 5 is a view similar to Fig. 4, but with the

plunger moved into position, with respect to the anvil so as to cut out a design on the shoe upper.

Fig. 6 is a sectional elevation of a fragment of a stripper plate.

Fig. 7 is a plan view showing the mask in position on an upper, and

Fig. 8 is a section on the line 17-17 of Fig. 7.

The machine illustrated in Fig. 1 has a supporting base 25 with guideways 26 thereon. The frame 18 extends upwardly and overhangs the base 25 and has guideways 22 for a pressure member or plunger 24. The mechanism is so arranged (see my said Letters Patent 1,681,033) to cause the pressure member or plunger to descend upon release of a clutch this being inhibited until the die support is moved to a position under the pressure member.

Arranged for sliding movement in the guideways 26 on the top of the platen 25 is a base 66 which has secured thereon and at its upper end a cutting anvil 67, the details of which are described in Patent 1,681,033. As best shown in Fig. 1, the protecting spaces or clearances at each side of the slide 66 and cutting anvil 67, when the same is in operative position under the plunger, provides a substantial working space for the hands of the operator above the platen 25 and below the plunger face 24 of the machine and at the sides of the work supporting and cutting devices to facilitate adjusting and holding of the work without danger of injury to the operator's hands.

Referring now to Figs. 2-8 inclusive wherein are shown the cutting anvil and attached work and mechanism, it will be noted by reference to Fig. 3 that the anvil 67 is removably secured to the base 66 by stud 68 and wing nut 70, a pin 71 secured to the under side of the cutting anvil 67 cooperating with a hole 72 in the upper surface of the base 66 for correctly positioning the cutting anvil 67 on such base. The cutting anvil 67 is perforated at 73 and secured to the upper surface of the anvil by screws 74 is a cutting die 75, the cutting dies being of any shape or form such, for example, as shown in my Patent No. 1,675,295.

Associated with the die structure 75 is a stripper plate 76 and lying between the stripper plate and the die structure 75 are compression springs 77 which tend to hold the stripper plate slightly above the plane in which lies the cutting edge of the die structure 75. Hingedly secured to the rear end of the cutting anvil 67 by hinge 78 is a mask 79. In this mask 79 is cut an opening 80 of such shape as to allow an upper 81 to be accurately positioned on the cutting anvil 67 with respect to the die 75 secured to such anvil. To facilitate the correct positioning of the upper on the cutting anvil 67, the contour of the opening 80, or certain portion of such contour, correspond in size and position, relative to the cutting die 75, with a seam or other fixed portion of the upper 81. With this arrangement, it is possible to correctly position an upper on the cutting anvil and in proper registry with the cutting die 75, even though it is impossible, under the circumstances, to directly observe the relation existing between the cutting die and the upper because of the fact that such cutting die is completely hidden by the upper. The mask 79 is of the shape, in longitudinal section, as shown in Fig. 4; that is, the left hand portion adjacent the hinge member 78 is engaged by the portions 82 and 83 of the mask. Such portions will hold one end of the upper 81 in approximate position and the complete position of the upper will then

take place, after which the operator will pull down the mask 79 into the position shown in Fig. 4 where it will be observed that the front portion of the upper is engaged by the portions 84 and 85.

The operation of my improved apparatus is as follows, it being assumed that such apparatus is constructed as above described. An appropriate cutting anvil 67 having secured thereon a cutting die 75 in which is fashioned the particular design desired to be cut from the material is provided. It is assumed that the design on the die 75 is that shown in Figs. 16 and 17 or may be that shown in Fig. 2. A mask 79 is provided with an appropriate cut out 80 of such shape as to allow the seam or other fixed or finished part on the upper to be clearly viewed through such opening and the seam properly centered with respect to the design on the die. This mask 79, to hold, to guard, guide, and protect the work is attached to the cutting anvil 67 by the hinge 78.

The operator slides the base 86 back or to the right, as viewed in Fig. 1, throws the mask 79 into an upright position, as viewed in Fig. 3, places an upper 81 into approximate position over the die 75, then swings the mask 79 downward so that the portions 82 and 83 thereof engage with the upper and, by grasping said upper on either side of the cutting anvil 67, the cut out portion 80 may be utilized as a means for registering and centering the seam or other finished part of the upper with respect to the design on the die 75 even though such die 75 is hidden from view by the upper and seam. After properly centering the upper 81, the mask 79 is pulled down into the position shown in Fig. 4. The operator now moves the base 86 with the attached portions thereon in proper position to the left, as shown in Fig. 1, until such base is brought to rest by the stop block 88.

Thereupon by depression of a treadle the pressure member is caused to strike the work, and cause the die to cut through the desired hole. As to aspects other than the mask, the features of my work support which are capable of use both in operating upon flat or sheet material, and the combination of materials such as is presented in a shoe upper of joined parts, lining, etc., wherein clearance and space is provided around and about the support, preferably below the line of the cutting operation, are covered elsewhere.

I may reverse the cutting elements and cause them to move down from above. In certain embodiments the cutting die including the cutting instrumentalities, stripper plates, and guiding masks may be separated into cooperating or interchangeably locked parts.

My die with mask plate will do all the operations heretofore performed upon flat bed machines, and in addition thereto, will operate advantageously upon articles having a curved contour such as is presented in shoe uppers. For this latter work I may apply a fitted, partly fitted, or completely fitted and closed upper on the work support, positioned either as shown in the drawings or in reverse direction, and indeed may position the work supporting slide either as shown or in reverse position.

My invention is further described and defined in the form of claims as follows:

1. The combination of a support, an ornamenting die on the support, means for stripping a shoe upper from the ornamenting die, and a shoe

upper gauging mask, said mask having position indicating means partially surrounding a portion of an upper being ornamented and shaped to correspond with portions of the shoe upper design, whereby said upper may be correctly aligned with said position indicating means.

2. The combination of a support, an ornamenting die on the support, means for stripping a shoe upper from the ornamenting die, and a shoe upper clamping mask, said mask having upper engaging means partially surrounding that portion of the upper being ornamented, and shaped to correspond with portions of the shoe upper design.

3. The combination for use in a machine for ornamenting parts of boots and shoes, comprising ornamenting means, means for stripping the work from the ornamenting means, clamping means, supporting means upon which said ornamenting means is mounted, said clamping means constructed to hold a portion of the work and substantially surround the ornamenting means with its opening shaped to correspond with portions of the shoe upper design.

4. A support for shoe upper material to be ornamented, comprising an ornamenting means and stripping means mounted thereon, and a clamping mask cooperating with said stripping means to hold a portion of shoe upper material under tension, said mask being provided with an edge portion to partially surround that portion of the upper material to be ornamented, said edge portion being shaped to act as a gauge for the positioning of the material beneath the mask.

5. In combination with a cutting die having cutting edges for cutting designs in shoe upper materials, a support for the die and a mask cooperating therewith, said mask constructed with one or more openings to partially surround the cutting edges of the die and adapted to be pressed against the work, the mask portions surrounding said openings shaped to correspond with portions of the upper material design.

6. In combination with a cutting die having cutting edges for cutting designs in shoe upper material, a support for the die and a mask cooperating therewith, said mask being provided with one or more edge portions to partially surround the cutting edges of the die, said edge or edge portions shaped to act as a gauge for the positioning of the material beneath the mask.

7. A support for shoe upper material and a clamping member cooperating therewith constructed and arranged to provide a preliminary yielding engagement permitting adjustment of the material, and subsequently a firm holding engagement therewith.

8. In combination, a cutting die provided with cutting edges, a support for said die, a mask for the cutting die mounted on said support, comprising a flat plate adapted to be pressed against the work, said plate being provided with an opening through which the work may be observed and accurately positioned with respect to the cutting edges of the die.

9. In combination, a cutting die provided with cutting edges, and a holddown plate for the cutting die comprising a flat plate adapted to be pressed against the work, said plate being provided with an opening to surround the cutting edges of the die, one edge of said opening being arranged to act as a gauge for the positioning of a piece of work beneath the holddown.

[fol. 184a] Mr. Allen: And as Exhibit No. 12, copy of re-issue patent No. 20,203.

(The said document was marked by the reporter as Plaintiffs' Exhibit No. 12.)

Plaintiffs' Exhibit No. 12 offered in evidence.

(Plaintiffs' Exhibit 12.)

(Reissue Letters Patent No. 20,203 to B. W. Freeman,
December 8, 1936.)

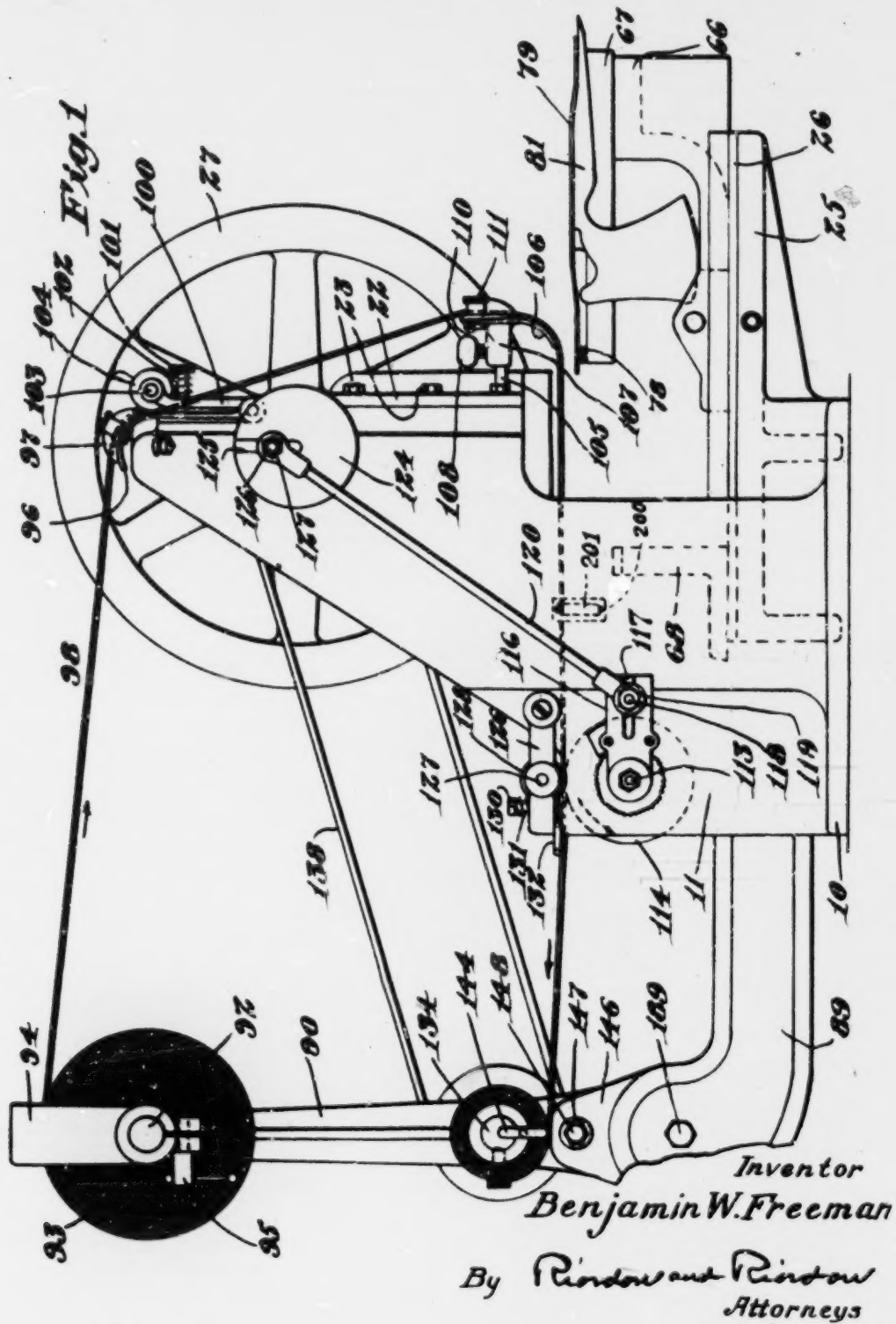
Dec. 8, 1936.

B. W. FREEMAN

Re. 20,203

CUT-OUT MACHINE FOR SHOE UPPERS

Original Filed Dec. 3, 1923 7 Sheets-Sheet 1



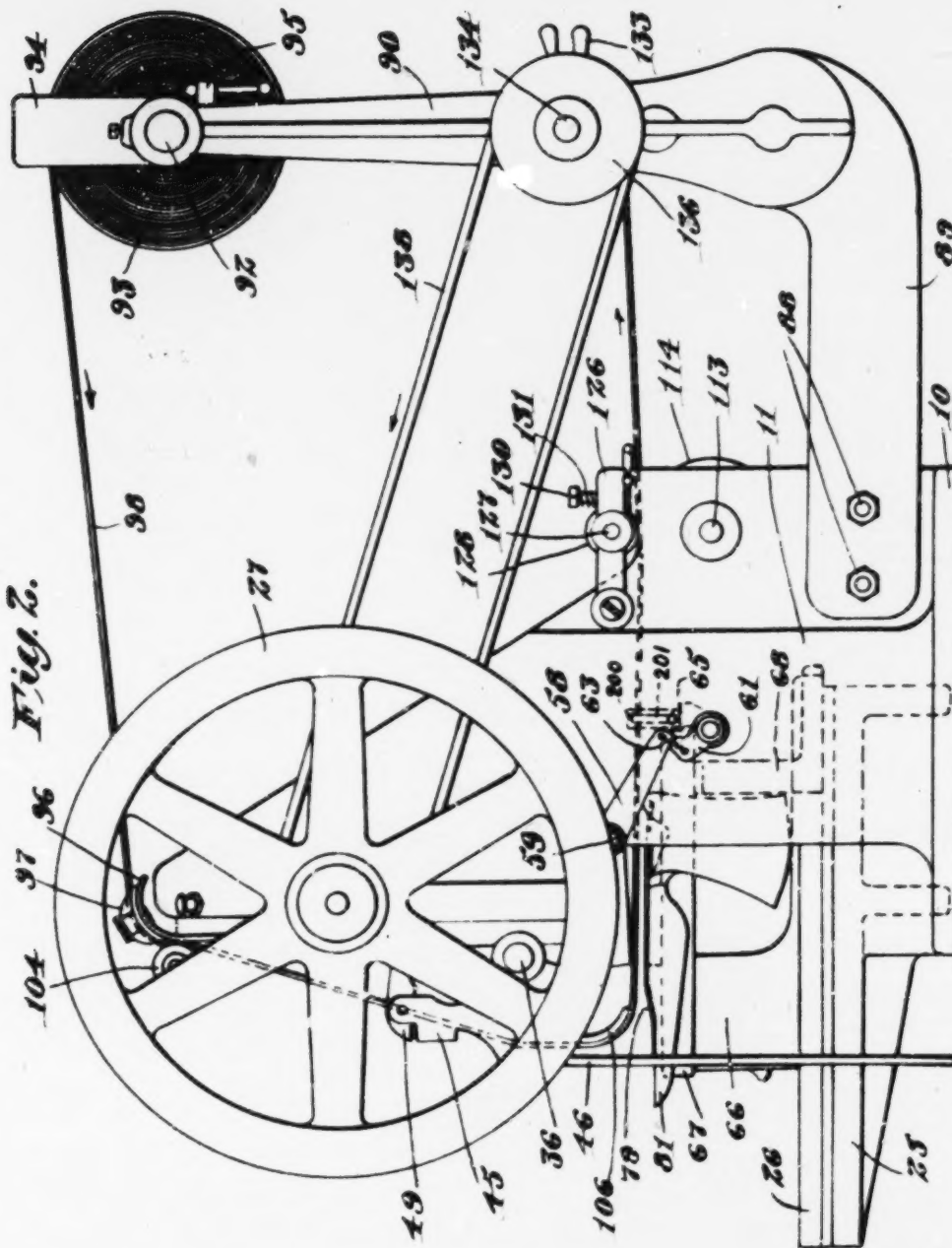
Dec. 8, 1936.

B. W. FREEMAN

Re. 20,203

CUT-OUT MACHINE FOR SHOE UPPERS

Original Filed Dec. 3, 1923 7 Sheets-Sheet 2



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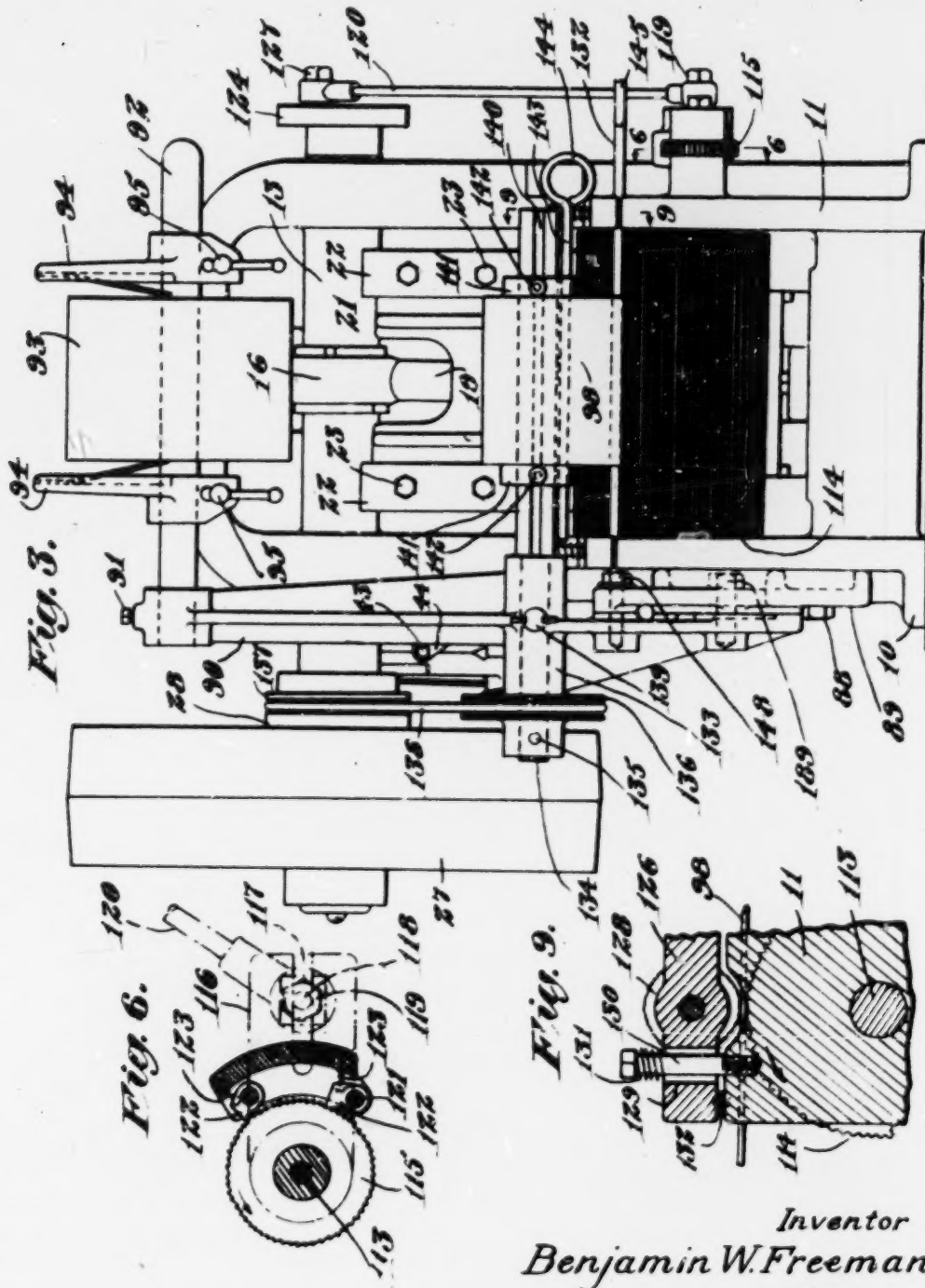
Dec. 8, 1936.

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CUT-OUT MACHINE FOR SHOE UPPERS

Original Filed Dec. 3, 1923 7 Sheets-Sheet 3



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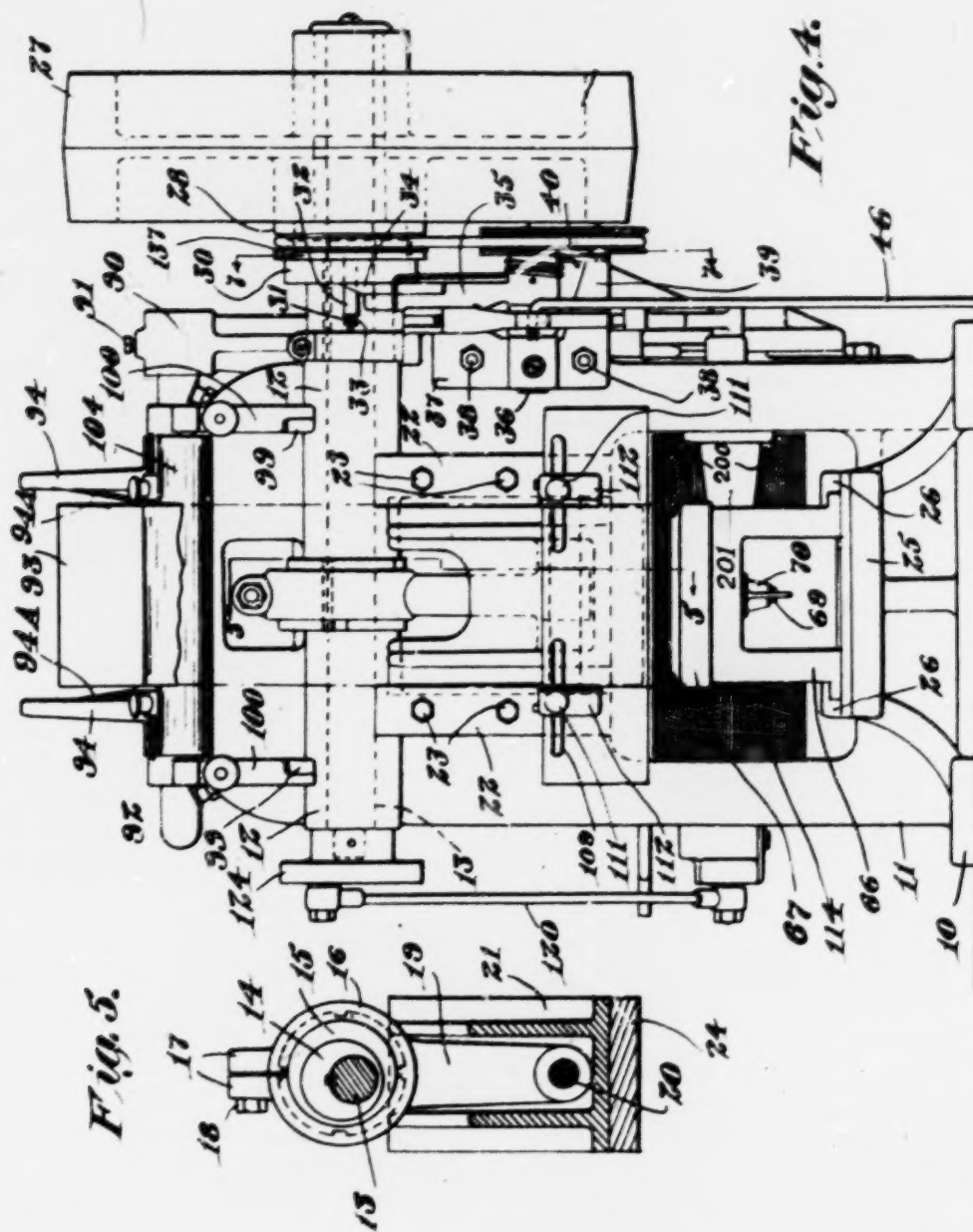
Dec. 8, 1936.

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CUT-OUT MACHINE FOR SHOE UPPERS

Original Filed Dec. 3, 1923 7 Sheets-Sheet 4



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CUT-OUT MACHINE FOR SHOE UPPERS

Original Filed Dec. 3, 1923 7 Sheets-Sheet 5

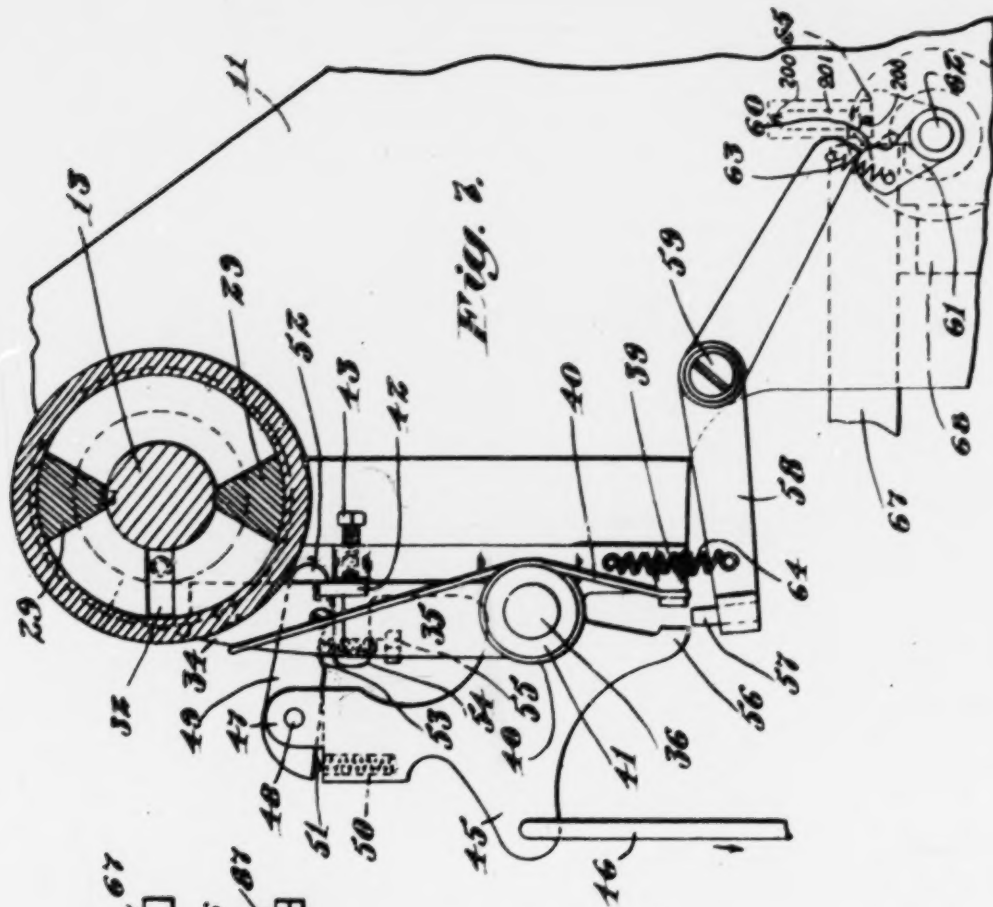


Fig. 7.

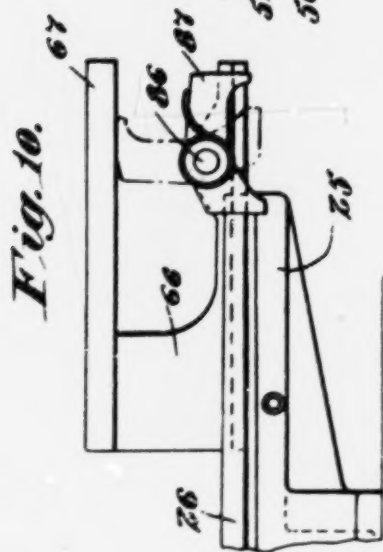


Fig. 10.

Fig. 8.



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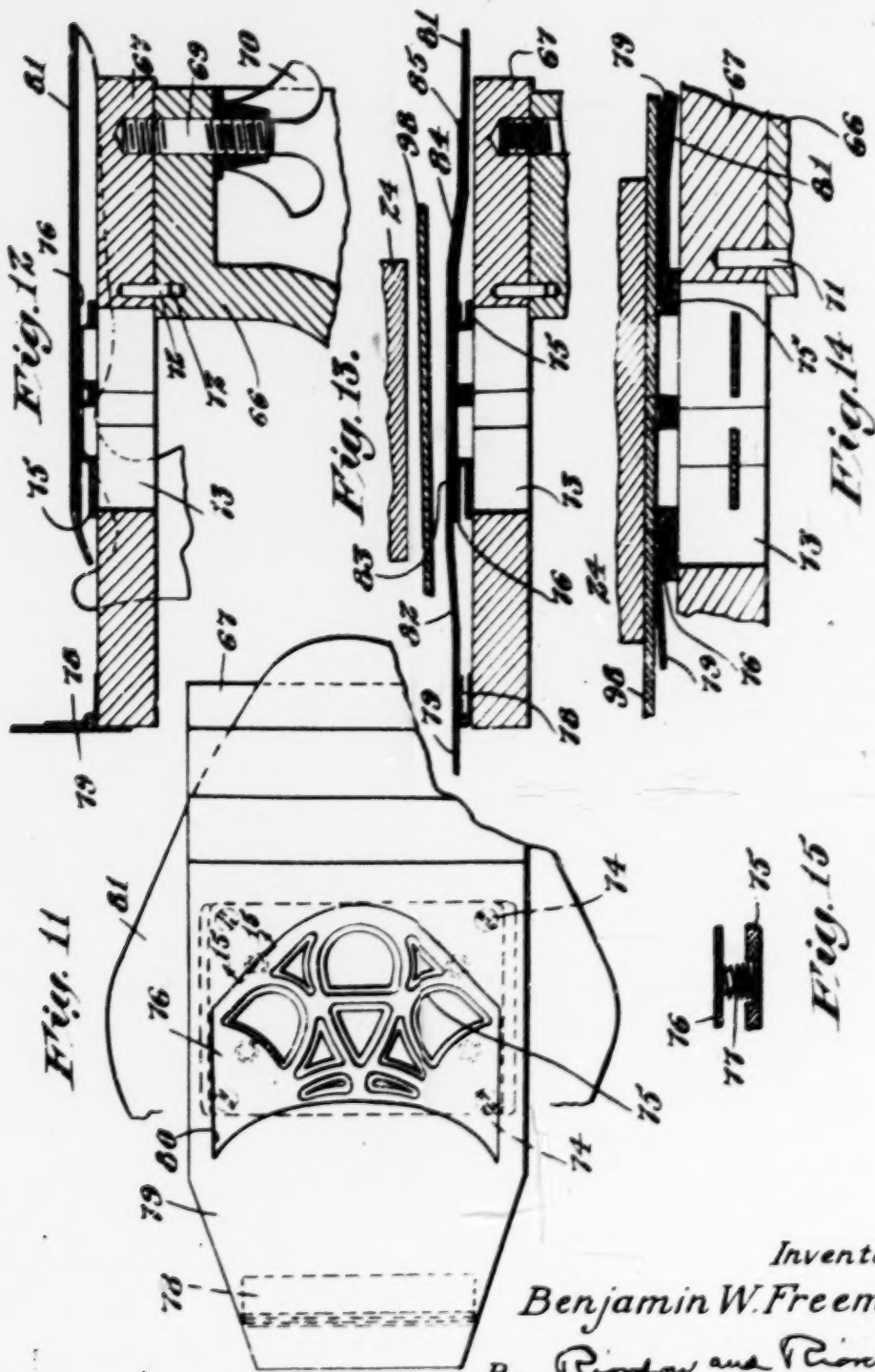
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Re. 20,203

CUT-OUT MACHINE FOR SHOE UPPERS

Original Filed Dec. 3, 1923 7 Sheets-Sheet 6



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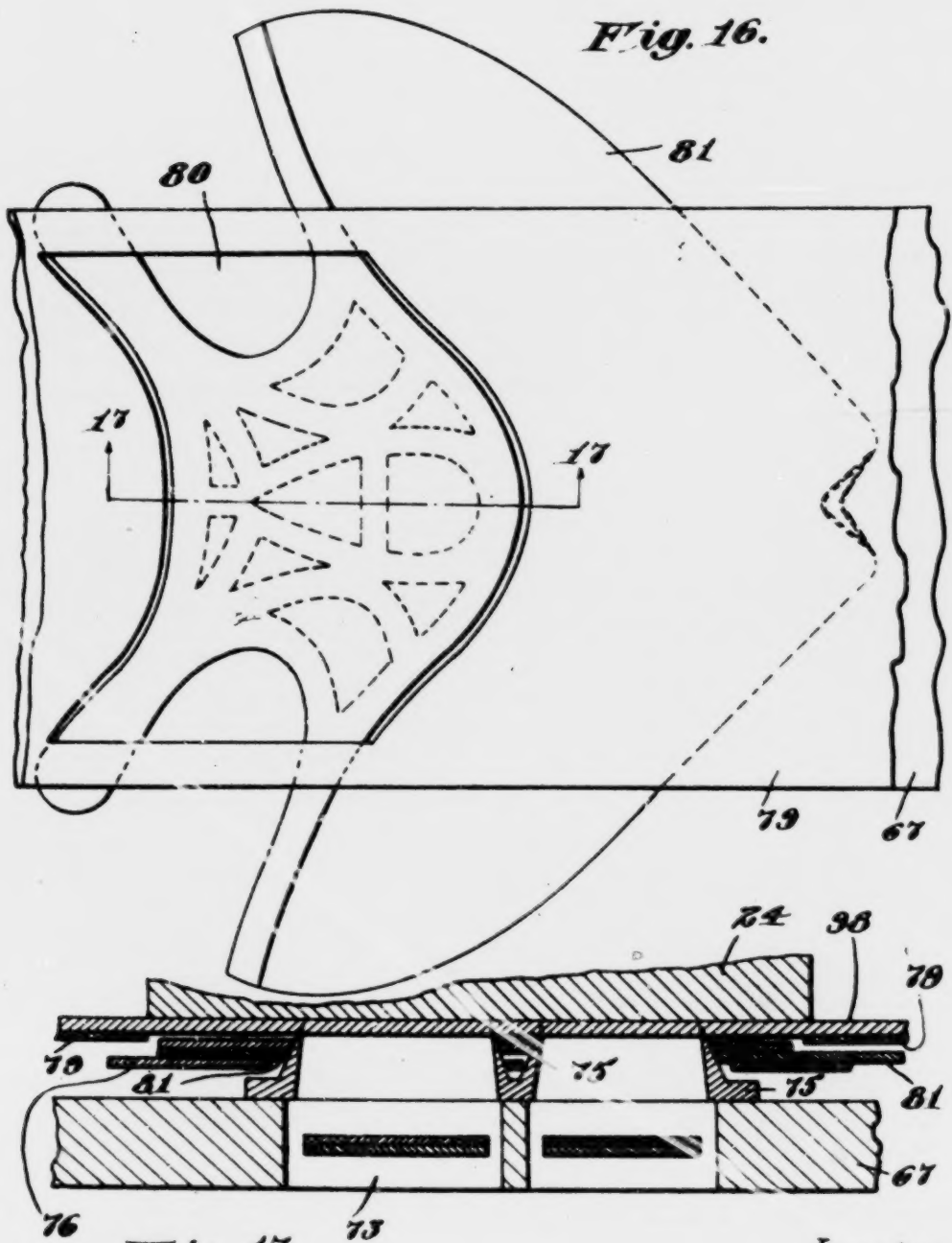
Dec. 8, 1936.

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Re. 20,203

CUT-OUT MACHINE FOR SHOE UPPERS

Original Filed Dec. 3, 1923 7 Sheets-Sheet 7



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UNITED STATES PATENT OFFICE

20,203

CUT-OUT MACHINE FOR SHOE UPPERS

Benjamin W. Freeman, Cincinnati, Ohio

Division B

Division of original No. 1,681,033, dated August 14, 1928, Serial No. 678,213, December 3, 1923.
Application for reissue October 30, 1936, Serial No. 108,480

40 Claims. (Cl. 164—93)

My present invention is a machine for use in the manufacture of boots and shoes, and particularly for forming the openwork or cut out sections in shoe uppers, as well as being utilized for all stamping work, perforating, ornamentation or the like, in connection with press machines.

This reissue application is a division of original Patent No. 1,681,033, granted August 14, 1928.

In presses or machines as heretofore made, it has been possible to operate only upon relatively small portions of flat material, such for example as cutting out toe tips, perforating and ornamenting sections or small portions of shoe uppers or the like, while my present machine is adapted to perform all of these operations and in addition thereto to perform cutting out operations heretofore impossible in machines capable only for flat press work. My present machine, therefore, is intended for use as a "universal" cutting out press, particularly intended for work on shoes, leather and shoe materials, and where the work is of widely varying contour and design.

In the present manufacture of openwork shoes, slippers, pumps and the like, particularly those intended for ladies' wear, it has been customary to first mark and then to cut out on a flat press the openwork portion of the vamp, quarter, foxing or the like before incorporating the same into the shoe upper and usually prior to uniting the cut out portion to any other portion of the upper. Then it was necessary to leave the linings of the shoe adjacent the cut out machine intact in order to prevent the distortion of the openwork portion during lasting. Then after the shoe was otherwise completed, it was necessary to cut out these linings by hand, and ink and finish the edges, etc., all this prior work requiring repeated handlings by skilled operators of each and every portion of the openwork shoe, cutting the same out with a hand tool, and resulting in unsatisfactory work, spoiled uppers and lack of uniformity in out-put.

My present invention is intended to obviate the difficulties above noted in manufacturing openwork shoes, and enables these shoes to be made by a new process, as explained in the patent granted to B. B. Brodfuehrer No. 1,605,916, dated November 9, 1926; and my Patent No. 1,675,295, granted to me June 26, 1928.

The machine of my present invention is directed to perform the cutting out operations for openwork shoes, following any design desired, as machine action, and furthermore as a machine operation either before or after the shoe upper portions,—vamp, foxing, quarters, tip, etc.,—are

uniting and uniting into the complete shoe upper, and preferably also with the thus completed shoe upper united at the heel, thus forming the "closed" article, open only at top and bottom. There are numerous advantages and economies in being able to stitch the upper, vamp, quarters, foxings, etc., together, as is now customary, and to unite the same at the heel, in order to have the shoe upper otherwise all ready for assembling on a last—as explained in my said Patent 1,675,295 copending application Ser. No. 677,319, filed November 27, 1923, but no machine heretofore made, so far as I am aware, has been capable of operating on such a closed upper to cut out the portions necessary to form the openwork part of the same. My present machine performs this cutting out operation and an important feature of the same is that it will operate with equal facility upon the sides of the upper, particularly a closed upper, upon the quarter sections, through the vamp, foxing, tongue portion, or tip. I am enabled to perform these operations by having provided means which will enable any portion or portions of the work, upper or other material to be presented, while held flat and preferably while held under tension, and to provide ample spaces or clearance for those portions of the material not being acted on by the cutting devices. A most important feature of the entire machine is in this provision of protecting spaces or clearance, guarding and protecting that portion of the work not desired to be cut, and yet enabling the openwork portion which is to be formed, to be quickly, accurately and removably presented to the cutting devices. Furthermore, this provision of the clearance, space, and protecting recesses for portions of the work is of ample area to facilitate the operator adjusting and holding the work, not only when positioning the same, but during the cutting operation, if desired, independently or in addition to a hold-down or mask, as will be hereinafter explained. This feature is of great importance, and being distinctly new, I claim the same broadly herein.

A further important feature consists in the provision of a machine and operating instrumentalities which will enable the openwork designs or formations to be cut out entirely through the upper or upper and lining and without previously marking or forming any pattern on the work. This desirable result I accomplish by the provision of work cutting and work holding means which will enable the cutting devices to be aligned or positioned with regard to a fixed edge or portion of the shoe upper itself; thus

insuring the cutting out action with exact uniformity upon successive uppers of similar design. This feature is most important in practice, as the cutting out action leaves a plurality of narrow strips or straps and the spacing or width of these straps is most important. By means of my invention, wherein the straps are formed with exact relation to the edge or predetermined portion of the shoe upper, such as the top seam, side stitching or other fixed portion in the design, the resulting openwork is formed accurately with all straps, widths and strips of proper width, and with opposite quarter sections, for example, in perfect cooperation. This is an important advantage resulting from cutting out the openwork portions after the shoe upper sections have been stitched and united, as distinguished from first cutting out the upper sections and then stitching and uniting same.

20 An additional feature in the present machine is that I have devised, invented and developed a novel type of combined anvil and cutting device, which I have termed a cutting anvil. In a machine of this type, it will be appreciated that it is necessary to have a capacity for constant change, variations and differences in design of the cut out portion, particularly when shoe uppers are being operated upon. Therefore, it is essential that interchangeable cutting devices be provided and I have devised in connection with the cutting devices an anvil on which the material is cut and permitting a ready interchange of designs and devices. Also it is desirable and in many instances it is essential that the material be held or clamped in fixed predetermined position, and therefore I have combined, in my cutting anvil, the cutting devices, an anvil-like member on which the work is held, together with clamping means, all constituting a complete self-contained unit, viz, my cutting anvil, which unit, furthermore, is interchangeable with others for operation in the same machine. Therefore my present invention includes means capable of instantly changing the machine from cutting one design or pattern, to an entirely different design or pattern, by the same interchangeability and adjustability of cutting anvils. Each cutting anvil has preferably, both the cutting devices for forming the cut out or openwork portions, together with a cooperating clamping member, adapted to hold the work firmly in position for the cutting out operation.

A still further feature and one of great importance, consists in the fact that I utilize the clamping means either alone or as a combined clamp or holder for the work, and preferably as a guiding, or gauging, or alining device, to insure that the cutting means and work will register. This enables me to eliminate entirely any marking or previously stencilling a design on the upper, before it is cut, as I can rely entirely upon the combined gauging and holding or clamping member to adjust the work relatively therewith, and the resulting cutting out operation insures perfect registering and alining of the design cut out, as, for example, with the fixed edges of a shoe upper. This feature in practice gives the important advantage of enabling the operator to speed up work on this machine, to quickly and accurately aline the work with regard to the clamp, because the latter is outside and on top of the work, while the cutting devices are underneath and out of sight. The operator need only position the work with regard to the topmost portion of the cutting anvil, viz, the clamp, and

then at once position the same under a moving part such as a plunger and the tripping of a treadle will complete the cutting out action.

The clamping device as above noted constitutes also a protecting guard for that portion of the work adjacent the cutting out devices, during the cutting operation, and furthermore I form this clamp as a complete guard partly or entirely around the cut-out portion. Thus I hold the part of the work to be cut out, not merely at one or two points, but partly or entirely around the openwork portion to be formed, the clamp being cut out proportionately or in cooperation with the design of the openwork and protecting, as well as holding the material being operated upon. This clamp is preferably made of thin sheet metal, and preferably also is hinged or otherwise removably attached to the cutting anvil as above explained, and is so constructed and arranged as to place the work under proper tension to prevent displacement of same during the cutting out operation. My improved clamp, which I have designated as a "mask", is of great importance in the operation of cutting out, perforating, or ornamenting parts or portions of material. Heretofore great difficulty has been experienced in operating upon such articles as vamps, toe tips, or the like, in flat bed cutting machines, as the material would wrinkle, would not lie evenly, and no prior clamping or holding devices of which I am aware, extended closely adjacent the line of pressure of such prior machines, except only at the immediate front of the machine. My invention of a holding, protecting, and also gauging mask, performs the very important and vital function of clamping the material to be operated upon, sufficiently along the side or sides of the cutting or ornamenting action and preferably partly or even entirely around the portion to be operated upon. Therefore, by extending my mask or clamping action beyond the former line of holding and partly surrounding the cut out or ornamented portion, I have eliminated prior difficulties, and am thus enabled to operate upon flat bed work much more advantageously than was formerly possible. In addition to this feature, my mask, clamp or guard in any form and in combination with protecting spaces, recesses or clearance, as herein explained, is new, and is claimed broadly herein. This clamp also, being of thin sheet metal, when adapted to press down upon a completed shoe upper, can easily have extra portions cut out for any purpose as at the tip seam or other place where there is an extra mass or thickness of material, and thereby prevent damage to the same, eliminate breaking of stitching, marring of patent leather, tearing strain on satin, suede or other material of which the upper is made.

Positioned and arranged under the protecting guard or mask I provide a yieldable element, cooperating with the portion of the material adjacent the sections to be cut out, to yield with the pressure or the plunger during the cutting out action, and acting as a "stripper" element during the release of the pressure and to lift and restore the uncut part of the work above the cutting dies. This stripper element may be any yieldable member, such as a steel plate mounted on a plurality of springs and having a form or contour substantially corresponding to the design of the cut-out die and resulting cut-out portions on the work. While I preferably utilize a metallic yielding strip, any yielding element

such as rubber or the like can be employed for this yielding and stripping action.

In addition to the fundamental features above noted, I have provided means which will insure the accurate operation of the cutting out action. I have incorporated my invention, as shown in the accompanying drawings, in a machine having a movable plunger to act upon the work, and through a yielding medium, such as heavy paper or the like, pressing through the paper and upon the work through the open portion of the clamp, pressing the work downwardly past the cutting devices on the anvil, permitting the cutting devices to penetrate the paper and thus insure a clean, clear cut entirely through the work. In order to insure an equal cutting throughout the entire extent of variations in design of cutting devices, I have arranged the pressure device, plunger or other moving member, and the position of the cutting devices, in a substantially balanced relation, so that the line of pressure of the plunger cooperating with the plunger resisting means will always be equally or substantially equally distributed throughout its action on the cutting edges, irrespective of the variations in contour of the cutting edges, which latter are formed of differing designs particularly for the openwork portions of a shoe. I accomplish this by having the supporting means or cutting anvils so positioned and arranged relatively with the line of pressure of the cutting operation; and the design carried by each anvil, that the supporting means, when the work or shoe upper is positioned thereon, and moved under the plunger, will cooperate with a fixed stop so as to bring the particular design carried by that supporting means, under the same central line of pressure, or balanced relationship with the plunger, as is necessary for equal cutting pressure. The feature of having the work firmly, rigidly and properly supported to resist the line of pressure of the cutting out action, is of very great importance in this type of machine, because of the difficulty of cutting through leather, through leather and canvas, through a shoe upper and only partly into the paper backing, and also because of the peculiar configuration and difficulty of supporting many of the cut out dies, especially when in curved or intricate designs. In order to prevent "springing" or distortion of the dies, and to insure uniformity of successive cut outs for each pair of shoes, and each shoe upper with the same design, the dies must be rigidly supported and directly under the line of pressure during the cutting out operation. To insure the accurate cutting out operation, and to carry out the "balanced" position as above explained, while also affording the clearance desirable for permitting this machine cutting operation, I support the die on a firm, rigid anvil or other equivalent work support, so that the line of pressure will be rigidly resisted and all "springing" and distortion of the dies prevented. In the particular form of die and supporting member, anvil or slide which I utilize in the present case, and wherein one portion of the die holder projects or overhangs same, to facilitate the fitting of a closed upper therearound, I provide a cooperating supporting post so that the die will be rigidly positioned, and the pressure from the plunger firmly resisted, thereby insuring the smooth and uniform cutting action of the dies, which is the important result desired. This gives long life to the cutting edges, insures equally clean cut edges

for any design, and insures a uniform and satisfactory operation of the machine.

An additional feature in the machine of my present invention and as shown in the accompanying drawings, consists in the fact of extra safety devices. Thus I have provided mechanism automatically actuated, which will prevent the starting of the machine, until the cutting anvil is in exact and predetermined position under the plunger. This automatic safety device comprises a dog or plunger which must be moved by the cutting anvil itself during the last portion of its positioning action, to thereby operate through mechanical levers or the like, to release means normally preventing the starting of the machine. Thus the operator cannot actuate the foot treadle and start the clutch and the machine until the die is accurately positioned, thereby preventing danger or damage from the plunger striking any part of the die work, to cause breakage or damage.

Additional novel features consist in the supporting devices for the cutting anvil, to permit great pressure thereon, and yet to prevent distortion or "springing" providing a firm and balanced pressure-resisting support in combination with the clearance desired; novel clutch means, insuring the accurate operation of the plunger, anvil and reversible supports for the cutting anvil; and other novel means, combinations of parts, and important advantages.

Referring to the drawings, illustrating preferred embodiments of my present invention.

Fig. 1 is an elevation of the left side of the machine;

Fig. 2 is an elevation of the right side of the machine;

Fig. 3 is a rear elevation of the machine;

Fig. 4 is a front elevation of the machine;

Fig. 5 is a detail sectional elevation on the line 5-5 of Fig. 4;

Fig. 6 is an enlarged detail on the line 6-6 of Fig. 3;

Fig. 7 is a vertical sectional elevation on the line 7-7 of Fig. 4;

Fig. 8 is an enlarged detail of the tripping lever block for the clutch;

Fig. 9 is a vertical sectional elevation on the line 9-9 of Fig. 3;

Fig. 10 is a fragmentary side elevation of the cutting anvil arranged on its carrying block;

Fig. 11 is a plan view of a cutting anvil showing one exemplification of a design to be cut out, for example, on the upper of a shoe;

Fig. 12 is a vertical sectional side elevation of a carrying block with a cutting anvil positioned thereon and with the upper in position to have a design such, for example, as that illustrated in Fig. 11 and stamped out therefrom, the protecting mask in this figure being shown out of its normal position;

Fig. 13 is a view similar to Fig. 12, but with the mask folded down in position on the upper and with the plunger of the press moving toward the cutting anvil, a strip of heavy paper being positioned between the plunger and the cutting anvil;

Fig. 14 is a view similar to Fig. 13, but with the plunger moved into position with respect to the anvil so as to cut out a design on the shoe upper;

Fig. 15 is a sectional elevation of a fragment of a stripper plate;

Fig. 16 is a plan view showing the mask in position on an upper, and

Fig. 17 is a section on the line 17-17 of Fig. 16.

Referring to the drawings, 10 designates a base

having formed integral therewith and extending upwardly therefrom a body 11 of a machine, which machine is adapted to rest on a bench or other support, and rotatably mounted in bearings 12 formed in the body 11 and adjacent to the top thereof is a power shaft 13. Keyed to the shaft 13 intermediate the ends of such shaft and between the bearings 12 is an eccentric 14 on which is rotatably mounted an eccentric ring 15 that is, in turn, adjustably mounted for rotation in an eccentric strap 16, this eccentric strap being split at one end and this end being provided with laterally extending lugs 17. One of these lugs 17 is drilled as a clearance hole for the body of a bolt 18 while the other of the lugs 17 is drilled to receive the threaded end of such bolt 18 and this bolt 18 is utilized, in connection with the lug 17, as a means for drawing the split end of the eccentric strap together in order to clamp the eccentric ring 15 therein. This eccentric strap 16 is formed integral with one end of a connecting rod 19, the other end of this connecting rod being pivotally attached to a shaft 20 secured in the lower end of a crosshead 21. This crosshead 21 is slidably mounted for vertical movement in guideways formed on the machine by means of straps 22, these straps being secured to the machine by bolts 23. The plunger 21 is provided on its lower end with a removable face 24. Formed integral with the body 10 and extending forwardly therefrom is a table or platen 25, which platen is provided on its upper face and on either side thereof with guideways 26 for a purpose to be hereinafter described. The platen 25 lies in the path of movement of the vertically movable plunger 21.

Rotatably mounted on the main shaft 13 and at one end thereof is a driving pulley 27, power being furnished from any suitable source to such pulley 27 to drive the machine. The inner face of the hub 28 of the driving pulley 27 is counter-bored and secured to the bottom of such counter-bored portion is a member provided on the face thereof adjacent the opening of the counter-bored portion with two radially arranged sectors 29, as shown in Fig. 7. Secured to the shaft 13 is a member 30 provided with a longitudinally arranged slot 31. Slidably mounted in the slot 31 is a rectangular plate 32, a spring 33 being arranged between the end of the slot 31 and such plate 32, which spring tends to force the plate 32 to the right, as viewed in Fig. 4 or into such a position as to engage with one or the other of the sectors 29. The plate 32 is provided on its outer edge with a V-shaped slot 9 in which is adapted to fit a wedge-shaped member 34. In the position shown in Fig. 4 with the wedge-shaped member 34 in the slot 9, the plate 32 is held to the left against the tension of the spring 33 and with its outer end out of engagement with the wedge-shaped sectors 29. Under these circumstances, the pulley 27 will be freely rotatable on the shaft 13 and the shaft 13 will remain stationary. If the wedge-shaped member 34 is withdrawn from the V-shaped slot 9, the spring 33 will force the plate 32 to the right, as viewed in Fig. 4, and such plate will be engaged by one or the other of the wedge-shaped sectors 29, thus locking the pulley 27 and the shaft 13 together and this condition will prevail until the wedge-shaped member 34 is replaced in its original position to engage in the wedge-shaped slot 9. The wedge-shaped member 34 is secured to the upper end of an arm 35 rotatably mounted on a shaft 36 secured in a member 37 attached to

the body 11 by bolts 38. The member 37 is provided with a projection 39 which extends upwardly toward the pulley 27 and secured to the end of this projection is one end of a spring 40, which spring is coiled around the hub 41 of the arm 35 and extends upwardly, its upper end entering a perforation near the upper end of the arm 35, as clearly shown in Figs. 4 and 7. This spring 40 is arranged to cause a rotative movement of the arm 35 about the shaft 36 in a clockwise direction, as viewed in Fig. 7, so that, normally, such arm 35 will maintain the plate 32 in its left hand position as viewed in Fig. 4 against the tension of the spring 30 and therefore the pulley 27 is free to rotate on the shaft 13. Secured to the front edge of the arm 35 in any suitable manner is a plate 42. Engaging such plate is an adjusting screw or bolt 43 that is threaded through a lug 44 formed integral with the body member 11, such adjusting screw or bolt 43 being utilized to adjust the inward or right hand movement of the arm 35 about the shaft 36. Rotatably mounted on the shaft 36 is a member 45. Pivotaly mounted on said member 45 is the upper end of a treadle rod 46 which extends downwardly to a point adjacent the floor and is provided with an operating treadle (not shown) for the convenience of the operator. Formed on the member 45 at its upper end are lugs or ears 47 in which is pivotally mounted on a pin 48 the latch member 49. The member 45 is drilled at 50 to receive a coil spring 51, the upper free end of this spring engaging with the rearwardly projecting end of the latch member 49 and tending to rotate such member 49 in a clockwise direction, as viewed in Fig. 7. The end of the latch member 49 remote from the pin 48 is provided with a hook end 52 which engages with the member 42. It is obvious, from an inspection of Fig. 7, that if the treadle rod 46 is pulled downwardly in the direction of the arrows shown, the hook 52 engaging with the plate 42 on the arm 35 will move the upper end of such arm 35 in an anti-clockwise direction and thus tend to pull the wedge-shaped member 34 out from the V-shaped slot 9 in the plate 32, thereby allowing such plate 32 to be moved to the right, as viewed in Fig. 4, under the influence of the spring 33. The under face or edge of the latch member 49 is cut away at 53 to form a cam. Formed integral with the body member 11 and extending outward therefrom is a lug 54 through which is threaded a bolt 55 and the upper end of such bolt 55 engages with the cam surface 53, as clearly shown in Fig. 7. The cam surface 53 is so arranged relative to the screw 55 that, as the latch member 49 moves to the left, as shown in Fig. 7 when the treadle rod 46 is moved downwardly in the direction of the arrow, the hook end 52 will move upwardly about the pin 48 as a center thereby releasing the plate 42 after the wedge-shaped member 34 has been moved from the V-shaped slot 9 in the plate 32. Under these circumstances, it will be apparent that, once the wedge-shaped member 34 has been removed from the V-shaped slot 9, the spring 33 will force the plate 32 to the right and into the path of movement of the wedge-shaped sectors 29 and the spring 40 will move the upper end of the arm 35, and therefore the wedge-shaped member 34, into position whereby the wedge-shaped member 34 will be ready to force itself into the V-shaped slot 9 when the plate 32 has completed one revolution. The above construction, therefore, provides a means for positively allowing but a single revolu-

tion of the shaft 13 by power transmitted from the pulley 27.

As a safety means for use in connection with the one revolution clutch above described, I have provided on the member 45 a downwardly and forwardly extending member 56 which lies directly opposite, but spaced apart from, the projection 39 formed on the member 37. Normally lying between the members 56 and 39 and filling the space therebetween is a plate 57 which is secured to, and extends upwardly from, the end of one arm of a bell crank lever 58, which bell crank lever is rotatably mounted on a shaft 59 secured to the body member 11, as clearly shown in Fig. 7. The other end of the arm of the bell crank lever is engaged by a cam surface 60 formed on an arm 61 secured to a shaft 62 rotatably mounted in the body member 11, a spring 63 secured at one end to the arm 61 and the other end to the arm of the bell crank lever 58 holding the cam surface 60 and the end of the arm of the bell crank lever 58 in engagement with each other. Secured to the body member 11 is one end of a coil spring 64, the other end of which is secured to the bell crank lever 58 adjacent the plate 57 and which spring 64 tends to rotate the bell crank lever 58 in a clockwise direction, as viewed in Fig. 7, and forcing the plate 57 upward and into position between the members 56 and 39. Secured to the shaft 62 intermediate the ends thereof is an arm 65, which arm lies above the platen 25, as clearly shown in Fig. 2. Arranged for sliding movement in the guideways 26 on the top of the platen 25 is a base 66 which has secured thereon and at its upper end a cutting anvil 67, the details of which will be later described. As best shown in Figs. 1 and 2, the projecting spaces or clearance at each side of the slide 66 and cutting anvil 67, when the same is in operative position under the plunger, provides a substantial working space for the hands of the operator above the platen 25 and below the plunger face 24 of the machine and at the sides of the work supporting and cutting device to facilitate adjusting and holding of the work without danger of injury to the operator's hands. Adjustably secured to the top of the platen by wing screw 168 is an anvil rest 68, which anvil rest acts as a support for the relatively unsupported end of the cutting anvil 67. Secured to the frame of the machine by screws 200 is a stop plate 201 which lies in the path of movement of the cutting anvil 67 and in such relation thereto that when the cutting anvil 67 engages the stop plate 201, the die 75 on such cutting anvil will be correctly positioned in the line of travel of the plunger 21. The arm 65 is so positioned on the shaft 62 and with relation to the rear end of the cutting anvil 67 that when the anvil 67 is moved to its most rearward position with the base 66 in engagement with the anvil 67, the rear end of such cutting anvil 67 will engage with the arm 65, rotating the shaft 62 and causing the cam surface 60 to engage with the end of one arm of the bell crank lever 58, rotating such bell crank lever in an anti-clockwise direction, as viewed in Fig. 7, and moving the attached plate 57 downward from between the members 56 and 39. At this instant the end of the cutting anvil 67 comes into engagement with the stop plate 201. When this point is reached, and only when this point is reached, will it be possible for the operator, by pressing on the treadle (not shown), to pull the treadle rod 46 downward and move the wedge-shaped member 34 out from between the

projection 33 and the hub 28. Of course, as the member 45 is rotated about the shaft 38, the hook end 52 of the latch member 49 will be released from the arm 35 and the spring 40 will tend to move the arm 35 back into its initial position. With this device, therefore, positive safety is assured in that it is impossible to operate the clutch mechanism until the work holding devices are correctly positioned beneath the plunger 21 and also it is impossible for the operator to allow the shaft 13 to continuously rotate.

Referring now to Figs. 11-17 inclusive wherein are shown the cutting anvil and attached work and mechanism, it will be noted by reference to Fig. 12 that the anvil 67 is removably secured to the base 66 by stud 69 and wing nut 70, a pin 71 secured to the under side of the cutting anvil 67 cooperating with a hole 72 in the upper surface of the base 66 for correctly positioning the cutting anvil 67 on such base. The cutting anvil 67 is perforated at 73 and secured to the upper surface of the anvil by screws 74 is a cutting die 75, the cutting dies being of any shape or form such, for example, as shown in my Patent No. 1,675,295.

Associated with the die structure 75 is a stripper plate 76 and lying between the stripper plate and the die structure 75 are compression springs 77 which tend to hold the stripper plate slightly above the plane in which lies the cutting edge of the die structure 75. Hingedly secured to the rear end of the cutting anvil 67 by hinge 78 is a mask 79. In this mask 79 is cut an opening 80 of such shape as to allow an upper 81 to be accurately positioned on the cutting anvil 67 with respect to the die 75 secured to such anvil. To facilitate the correct positioning of the upper on the cutting anvil 67, the contour of the opening 80, or certain portions of such contour, correspond in size and position, relative to the cutting die 75, with a seam or other fixed portion of the upper 81. With this arrangement, it is possible to correctly position an upper on the cutting anvil and in proper registry with the cutting die 75, even though it is impossible, under the circumstances, to directly observe the relation existing between the cutting die and the upper because of the fact that such cutting die is completely hidden by the upper. The mask 79 is of the shape, in longitudinal section, as shown in Fig. 13; that is, the left hand portion adjacent the hinge member 78 is engaged by the portions 82 and 83 of the mask. Such portions will hold one end of the upper 81 in approximate position and the complete position of the upper will then take place, after which the operator will pull down the mask 79 into the position shown in Fig. 13 where it will be observed that the front portion of the upper is engaged by the portions 84 and 85. I have described the base 66 as being slidable in the guideways 26 and have shown such a base with the cutting anvil thereon so arranged in the guideways 26 as to have the end of the cutting anvil 67 carrying the hinge 78 come into engagement with the member 65 secured to the shaft 62. It is obvious, therefore, that I may reverse the position of such base 66 in the guideways 26. It will be noted from an inspection of Figs. 2 and 3 that the end of the cutting anvil 67 carrying the hinge 78 rests on top of the stop 68, this for the reason that such stop 68 acts as a support for the free end of such cutting anvil 67 and insures that the cutting anvil 67 will be held perfectly rigid against the shock imparted to it by the plunger 21. When the base 66 is reversed in the guides 26, as shown in Fig. 10, the stop 68 can no longer support the

free end of the cutting anvil 87. I have, therefore, on the base 86 pivotally mounted on shaft 88 a stop or support 87 which may be swung into position, as shown in dotted lines, so that, regardless of the manner of positioning the cutting anvil 87 on the platen 25, it will be firmly supported throughout its entire length and width against any shock imparted to it by the plunger 21.

One of the important features of my invention is the provision of means for utilizing a single continuous strip of paper of indeterminate length between the plunger and the cutting die and utilizing practically every portion of such paper. Heretofore in operating cutting dies for cutting out designs on leather and the like, it has been usual and necessary to use a relatively long strip of paper for each cutting operation performed, and as but a very small portion of such strip of paper was used, the waste was considerable. My present device obviates the objections to prior structures and enables me to utilize every available portion of paper in a strip of indeterminate length. Secured to the body member 11 and at one side thereof by bolts 89 is a member 89. Pivotally attached to the rear end of the member 89 on bolt 100 is the lower end of a standard 90. The member 89 is provided with a portion 146 above the pivot bolt 100 and this portion 146 is provided with an arcuate slot 147 through which passes a bolt 148 that screws into the standard 90. By means of the arcuate slot 147 and bolt 148 the standard 90 is capable of limited adjustable movement about the bolt 100 as a center. At the upper end of this standard 90 is secured by setscrew 91 a shaft 92, which shaft lies parallel with the driving shaft 13. On the shaft 92 is adapted to be placed a roll of paper 93 and on the shaft and on each side of the roll of paper 93 are adjustable brackets 94 such brackets being adjustably secured to the shaft 92 by screws 95. Secured to the front of the body member 11 and at the top end thereof is a curved guide plate 96 provided at either side thereof with adjustable guide plates 97 for guiding the edges of the paper 98 fed from the roll 93. The front of the body member 11 below the curved guide plate 96 and on either side of such body member is provided with forwardly extending lugs or ears 99 and to each of such ears 99 is pivotally attached the lower end of a bearing arm 100. Screwed into the front of the body member 11 and extending through a perforation in each of the bearing arms 100 is a thumb screw 101 and located between the head of such thumb screw 101 and the associated bearing arm 100 is a coil spring 102 which tends to force the bearing arms 100 about their pivot point as a center in an anti-clockwise direction. Rotatably mounted at the upper end of the bearing arm 100 is a shaft 103 on which is secured a roller 104, which roller bears against the paper 98 as it passes over and around the curved guide plate 96. Secured to the lower end of each of the guide plates 22 and extending forwardly outward therefrom, as shown in Fig. 1, are studs or rods 105. Numeral 106 designates a curved guide plate over which the paper 98 passes, and secured to the rear face of such guide plate in any suitable manner are lugs 107 spaced apart from each other and drilled to each receive one of the studs or rods 105, acting thereby as a means for positioning the curved guide plate 106 on the machine. The lugs 107 are drilled and tapped to receive the thumb screws 108 and by means of which the curved guide plate 106 may be adjustably mounted on the studs or rods 105. The upper portion of

the curved guide plate 106 is provided with a pair of slots 109 in alignment with each other, as clearly shown in Fig. 4, and passing through such slots are studs 110 that are threaded at their outer end to receive a thumb nut 111. The studs 110 and thumb nuts 111 act as means for securely and adjustably positioning on the outer end or face of the curved guide plate 106 the edge of the guides 112 arranged one on either side of the strip of paper 98.

Rotatably mounted in suitable bearings in the body member 11 and lying parallel to the shaft 92 or the drive shaft 13 is a shaft 113 on which is securely mounted a corrugated roller 114. The shaft 113 extends outward beyond the side of the body member 11 and has secured adjacent its extreme outer end a ratchet wheel 115. Rotatably mounted on the shaft 113 is a bracket 116 provided with a longitudinal slot 117 in which is adjustably mounted by bolt and nut 118 and 119 respectively the lower end of a connecting rod 120. Pivotally mounted in the bracket 116 on parallelly arranged spaced shafts 121 are ratchets 122, springs 123 associated one spring with each of the ratchets 122 forcing such ratchets into engagement with the ratchet wheel 115. It will be obvious, from an inspection, for example, of Fig. 6, that an oscillatory movement of the bracket 116 will cause an intermittent or step by step movement of the ratchet wheel 115, and therefore the shaft 113, in the direction of the arrow shown in such figure. Secured to the shaft 13 remote from the driving pulley 27 is a face plate 124 provided with a radial slot 125 in which is adjustably mounted by means of bolt 126 and nut 127 the upper end of the connecting rod 120. The radial slots 117 and 125 make it possible to alter the extent of oscillatory movement of the bracket 116 imparted to it by the intermittent rotary movement of the shaft 13. Pivotally mounted on the body member 11 on each side of said member and above the corrugated wheel 114 are arms 128 and rotatably mounted on such arms in suitable bearings formed therein is a shaft 127, such shaft lying above, and parallel to, the shaft 113. Secured to the shaft 127 is a corrugated feed roll 129 which cooperates with the corrugated feed roll 114 above described. Each of the arms 128 is provided adjacent its free end with an elongated vertical slot 129 through each of which passes a stud 130 that screws into the body member 11, as clearly shown in Fig. 9. Between the under face of the head of the stud 130 and the upper surface of the arm 128 is arranged a coil spring 131 which exerts a downward tension on the arm 128 and tends to hold the corrugated roller 129 in engagement with the corrugated roller 114. The paper 98 is fed between the corrugated rolls 114 and 129, an intermittent rotary motion being imparted to the corrugated roll 114 by the oscillatory movement of the arm 116, and the paper 98 will be fed rearwardly of the machine. Secured between the body member 11 and the bearing arms 126 and located above, and extending transversely of, the paper 98 is a guide rod 132. The paper passes under such guide rod 132 and is led rearwardly of the machine. The portion of the rod 132 directly engaged by the body member 11 and arms 128 is flattened, or non-circular in shape, as clearly shown in Fig. 9 and it will be obvious, therefore, by rotating such rod by means of its handle or eye 145 that the end of the arms 128 will be lifted up, separating the corrugated roll 129 a sufficient distance from the corrugated roll 114 to allow the strip of paper 98 to be threaded there-

between. Formed intermediate the ends of the standard 90 is a bearing 133 in which is rotatably mounted a shaft 134, which shaft lies parallel to the shaft 92 above described. Secured to the end of the shaft 134 by setscrew 135 is a grooved pulley 136. Formed on the hub 28 of the driving pulley 27 is a pulley groove 137 that is in alinement with the groove in the pulley 136 and in the pulley grooves runs a belt 138 and by means of which rotary motion is imparted to the shaft 134 from the drive shaft 13. Screwing into the bearing 133 so as to engage the shaft 134 is a wing screw 139 for a purpose to be hereinafter described. The shaft 134 extends from the bearing 133 parallel to the shaft 92 and this extended portion is greater in diameter than the portion that passes through the bearing 133. This enlarged portion is provided with a longitudinally extending keyway or groove 140. Slidably mounted on the enlarged end of the shaft 134 are collars 141, each provided with a threaded hole to receive a thumb screw 142, the end of which is guided into the keyway or groove 140. By properly adjusting the collars 141 on the enlarged end of the shaft 134, the strip of paper 98 is properly guided, as clearly shown, for example, in Fig. 3. Each of the collars 141 is provided with a hole, the holes being in alinement with each other and through which passes a rod 143, which rod is provided on its end with an eye 144 and by means of which the rod 143 may be handled or operated. The end of the strip of paper 98 is folded over about two inches from its end and placed under the rod 143. By revolving the shaft 134, the end of the paper 98 is started onto the shaft 134. After the paper has been used and wound from the shaft 92 onto the shaft 134, it may be easily removed from the shaft 134 by withdrawing the rod 143. While placing the folded end of the strip of paper under the rod 143 and while adjustably securing the collars 141 in position, the wing setscrew 139 is utilized to hold the shaft 134 against rotation.

The operation of my improved apparatus is as follows, it being assumed that such apparatus is constructed as above described. An appropriate cutting anvil 67 having secured thereon a cutting die 75 in which is fashioned the particular design desired to be cut from the material is provided. It is assumed that the design on the die 75 is that shown in Figs. 16 and 17 or may be that shown in Fig. 11. A mask 79 is provided with an appropriate cut out 80 of such shape as to allow the seam or other fixed or finished part on the upper to be clearly viewed through such opening and the seam properly centered with respect to the design on the die. This mask 79, to hold, to guard, guide and protect the work is attached to the cutting anvil 67 by the hinge 78. The stop block 68 is now positioned on the platen 25 in such manner that the die 75 is attached to the cutting anvil 67 will be located beneath the plunger 21 when the base 66 is in its rearmost position and against the stop plate 201, and resting on the supporting post 68 in balanced relation to the design of the die so that equal pressure will be placed on all parts of the die. A roll 93 of paper, such paper being of substantial thickness as compared to the thickness of the material being worked on, is placed on the shaft 92, drawn over and around the curved guide plate 96 and under the guide tension roll 104, the guides 97 secured in position, the paper passed over the curved guide plate 106 rearwardly of the machine between the corrugated rolls 114 and 120, as above described, the end of the paper 98 folded and

passed under the rod 143 and around the shaft 134. The horizontal plane in which is located the cutting edge of the die 75 is spaced apart from the horizontal plane in which lies the lower face of the facing 24 attached to the plunger 21 when such plunger is in its lowermost position, a distance less than the thickness of the strip of paper 98. The strip of paper 98 will, therefore, act as a die block against which the cutting edge of the die works and as a new portion of paper is presented to the dies at every stroke of the press, there is, in reality, a new die block brought into association with the die at every stroke of the press. Further, as the strip of paper 97 is never entirely cut through by the cutting die 75, the amount of movement of the strip of paper for each stroke of the plunger of the press need only be sufficient to present a new uncut surface to the die, and, in practice, such movement of the paper 98 need only be approximately one sixteenth of an inch. In addition to the advantage of having practically a new die block presented to the cutting die at each stroke of the plunger, there is the added advantage that but approximately one sixteenth of an inch of paper of the strip 98 is used up at any one stroke of the die instead of the using up of a strip of paper of from six to fifteen inches in length as has heretofore been the custom. It being assumed that the paper 98 is threaded through the machine, the appropriate die and mask fitted on the cutting anvil 67, and the stop block 68 properly adjusted, power may now be thrown onto the machine through the pulley 27. The operator slides the base 66 back or to the right, as viewed in Fig. 1, throws the mask 79 into an upright position, as viewed in Fig. 12, places an upper 81 into approximate position over the die 75, then swings the mask 79 downward so that the portions 82 and 83 thereof engage with the upper and, by grasping said upper on either side of the cutting anvil 67, the cutout portion 80 may be utilized as a means for registering and centering the seam or other finished part of the upper with respect to the design on the die 75 even though such die 75 is hidden from view by the upper and seam. After properly centering the upper 81, the mask 79 is pulled down into the position shown in Fig. 13. The operator now moves the base 66 with the attached portions thereon in proper position to the left, as shown in Fig. 1, until such base is brought to rest by the stop block 68. Prior to the engagement of the stop block 68 by the base 66, the cutting anvil 67 will engage with the arm 65 on the shaft 62. Such shaft 62 will be rotated and the arm 65 on the outer end thereof will engage with the cam surface on one arm of the bell crank lever 55, moving the other arm downwardly, as viewed in Fig. 7, and withdrawing the member 53 attached to such arm from between the members 56 and 58, as above described. The operator, by now pressing on the treadle (not shown), is able to pull down the treadle rod 46, rotating the member 45 about the shaft 35 and moving the upper end of the member 45 outward, but to the left, as viewed in Fig. 7. The hook end 52 of the latch member 49 engaging with the plate 42 attached to the arm 35 will move the upper end of such arm to the left about the shaft 35, withdrawing the wedge-shaped member 34 from the V-shaped groove 8 in the plate 32. This allows the spring 33 to force the plate 32 to the right, as viewed in Fig. 4, and into the path of movement of the wedge-shaped sectors 29 on the hub 28. Rotary motion is therefore imparted

to the shaft 13 which, by means of the eccentrics 14 and 15, will cause a downward movement of the plunger 21, thus bringing the facing 24 on the bottom of such plunger against the paper 98 and forcing the paper 98 into engagement with the cutting die 75. The parts are now in the position shown in Fig. 14 and it will be noted that, while the cutting die 75 has penetrated the strip of paper 98, it has not pierced such paper which, to all outward appearances on one face thereof at least, is intact. As the latch member 49 is moved outward, or to the left, as viewed in Fig. 7, the cam surface 53 on the lower edge thereof rides up on the upper end of the cam screw 55, causing a rotative movement of the latch member 49 about the pin 48 and over the hook end 52 from the plate 42. Immediately such hook end 52 is freed from the plate 42, the spring 40 forces the upper free end of the arm 35 to the right, as viewed in Fig. 7, and moves the wedge-shaped member 34 in position to engage with the V slot 9 in the plate 32 in such plate which was brought into position by the rotative movement of the shaft 13. On engaging with the V slot 9, the wedge-shaped member 34 moves the plate 32 to the left, as viewed in Fig. 4, uncoupling the shaft 13 from the pulley 27. The upper end of the arm 35 engaging with the plate 32 positively stops further rotative movement of the shaft 13. This device is, therefore, a positive one revolution clutch, and but one revolution can be imparted to the shaft 13 by one operation of the treadle rod 46 which must, of necessity, be returned to its initial position in order to allow the hook end 52 and the member 49 to again come into engagement with the plate 42.

Rotative movement of the shaft 13 causes, also, rotative movement of the face plate 124 and, therefore, a complete reciprocatory movement of the connecting rod 120 for each complete revolution of the shaft 13. Reciprocatory movement of the connecting rod 120 imparts a reciprocatory movement to the arm 116 and the pawls 122 engaging with the ratchet wheel 115, impart an intermittent rotary movement to the shaft 113. The corrugated feed roll 114 on the shaft 113 and the corrugated feed roll 128 gripping the paper 98 therebetween, impart a feeding movement to the left, as viewed in Fig. 1, to such paper. As the slight length of paper 98 is fed to the left, as viewed in Fig. 1, by the feed rolls 114 and 128, which creates a slackness in that length of paper extending from the corrugated rolls to the shaft 134. The belt 130 is rather slack on the pulley 136 and in the pulley groove 137, so slack, in fact, that there is a slippage between the belt 130 and the pulleys so that the shaft 134 constantly tends to pull the strip of paper 98 from the feed rolls 128 and 114. As soon as such slack is created in the length of paper 98 from the feed rolls to the shaft 134, the belt 130 will rotate the shaft 134 sufficient to take up such slack.

The sequence of operations above described may take place indefinitely, the paper 98 being moved step by step across the path of the plunger 21 to present a new uncut surface to the die 75 and the extent of each step by step movement is sufficient for this purpose and is short enough to insure that practically every available bit of paper is used.

While I have necessarily shown and described the preferred embodiment of my invention somewhat in detail, it is to be understood that I may vary the size, shape, and arrangement of parts

within wide limits without departing from the spirit of the invention.

Various modifications within the scope of the invention and the appended claims will readily occur to those skilled in the art. Thus I may reverse the position of the cutters and mount the same on the movable plunger or other pressure applying means; the plunger may be moved either from above downwardly, or from below upwardly; the entire cutting anvil, while preferably in a single unit, including the cutting instrumentalities, stripper plates, cutting and guiding masks, may, of course, be separated into co-operating or interchangeably locked parts. Also while it is an important feature of the present machine to utilize relatively heavy paper through which to perform the cutting action, it is, of course, entirely feasible to employ a soft material, such even as a sheet of brass, composition, rubber or the like suitable cutting surface. Paper is preferred because it does not dull the cutting edges of the die. It will also be appreciated that my machine in addition to the capacity for performing the highly difficult and involved cutting out actions on closed shoe uppers, as herein illustrated and explained, is also capable of performing the more simple cutting out actions, such for example as tip perforating, toe ornamentation, etc., and in fact the cutting devices could be fitted to perform both cutting out and tip perforating simultaneously, as will be readily understood. By means of the construction and arrangement of the cutting anvil and the clearance or space allowing for concealing, protecting and guarding the shoe upper at any point below the plane of the cutting operation by recesses in the top, at the side or underneath the anvil, a substantially universal cutting, perforating, and ornamenting machine, particularly suitable for advantageous use in shoe manufacture, is produced, giving a machine of this type suitable for performing all these intricate operations on shoe uppers or parts of the same, which heretofore required separate machines or difficult hand operations. The feature of my work support which is capable of use both in operating upon flat or sheet material, the combination of materials such as is presented in a shoe upper of joined parts, lining, etc., wherein clearance and space is provided around and about the support, preferably below the line of the cutting operation, is of the greatest importance. Particularly is this feature important when operating upon a shoe upper, whether flat, a fitted or partly fitted upper, or a completely fitted and closed upper. That part of the work which is not being operated upon to constitute the cut-out portion, may thus be protected, guarded and held within the recesses, spaces, clearance or room about, under, or partly under the work support, which capacity is one of the important characteristic novelties of my present invention. This feature of the protecting recesses, space and clearance, distinguishes my present invention from all former tip perforating or the like machines, wherein a flat bed or support was utilized, but without any capacity for operating upon any work except flat pieces. As above noted, my machine will do all the operations heretofore performed upon flat bed machines, and in addition thereto, will operate advantageously upon articles having a curved contour such as is presented in shoe uppers. For this latter work I may apply a fitted, partly fitted, or completely fitted and closed upper on the work support, positioned either as shown in the drawings or in reverse direction, and indeed

may position the work supporting slide either as shown or in reverse position.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States, is:—

1. A machine of the kind described, having pressure applying means, ornamenting means mounted independent of said pressure applying means and co-operating therewith, means for supporting the ornamenting means, said ornamenting means and said supporting means constructed and arranged to support in a substantially flat position a portion of a shoe upper made up of two or more pieces of flat material attached together such that the combined pieces forming the shoe upper cannot be placed in a flat position, and to allow other portions of the upper to extend about its sides without buckling the portion of the upper to be ornamented.

2. A machine of the kind described, having pressure applying means, ornamenting means, movable means for supporting the ornamenting means, said ornamenting means and supporting means constructed and arranged to support flatwise a portion of a shoe upper made up of two or more pieces of flat material attached in such a manner that the combined pieces cannot be placed flatwise, and to allow other portions of the upper to extend about its side without buckling the portion of the upper to be ornamented.

3. A machine of the kind described, having work supporting means, pressure applying means, and shoe ornamenting means mounted independent of said pressure applying means and cooperating therewith, said machine constructed and arranged to provide a substantial work receiving space extending below the plane of the ornamenting action and along lateral sides of the work supporting means and ornamenting means.

4. A machine for cutting out open work patterns in shoe uppers, having a support for work, pressure applying means, and cutting devices having upstanding cutting members for cutting out designs in predetermined portions of the work mounted independent of the pressure applying means and cooperating therewith, said machine constructed and arranged to provide a substantial work receiving recess disaligned from the plane of the cutting action.

5. The combination for use in a machine for cutting designs in shoe upper material having clutch locking mechanism, comprising a cutting die, a movable support for the die, and means for releasing the clutch locking mechanism by the movement of the support.

6. The combination for use in a machine for cutting designs in shoe upper material having clutch locking mechanism, comprising a cutting die, a movable support for the die, and a clamping mask to hold the upper material under tension, and means for releasing the clutch locking mechanism by the movement of the support.

7. The combination for use in a machine for cutting designs in shoe uppers having clutch locking mechanism, comprising a cutting die, a movable support for the die, said support and die constructed and arranged with a flat-wise top portion to support in a substantially flat position a portion of an upper to be cut and with lateral sides about which the upper is draped, preventing buckling of the shoe upper while the design is cut therein, and means for releasing the clutch locking mechanism by the movement of the support.

8. The combination for use in a machine for cutting designs in shoe uppers having clutch locking mechanism, comprising a cutting die, a movable support for the die, means associated with said die and support to act as a gauge for the positioning of the material with relation to the die, and means for releasing the clutch locking mechanism by the movement of the die and support.

9. A machine for forming openwork in shoe uppers, having cutting out devices, a support for said devices, means to act as a guide for the positioning of a finished portion of the upper relatively to the cutting out devices, and means on the support for holding the upper thus positioned, one of the sides of said support constructed with an upper receiving opening.

10. A machine for cutting out predetermined portions of a shoe upper, having, in combination, a plunger, a work support, a cutting die mounted independent of the plunger, and means co-operating with the work support and with work supported thereon to act as a gauge in positioning substantially flatwise with relation to the cutting die, that portion of the work to be cut, said support having recesses to receive a portion of the work in other than a flat position.

11. A machine for cutting out predetermined portions of a shoe upper, having, in combination, an auxiliary support, a work support movable into and out of engagement with said auxiliary support, a cutting die positioned on the movable work support, and means co-operating with the movable work support and with work supported thereon to act as a guide in positioning the work with relation to the cutting die.

12. A machine of the kind described, comprising work supporting means, cutting devices having cutting edges, pressure applying means, and backing material toward which the cutting edges are directed, said machine providing, for a portion of the work, substantial work receiving spaces disaligned from the plane of operation.

13. A machine of the kind described, comprising work supporting means, cutting devices having cutting edges, pressure applying means, backing material toward which the cutting edges are directed, and means to impart movement to the backing material, said machine providing, for a portion of the work, substantial work receiving spaces disaligned from the plane of operation.

14. A machine for cutting out openwork patterns in shoe uppers, having, in combination, a pressing member, a work support, a cutting die on said support, said die and support constructed to support a portion of an upper in a substantially flat position and to be moved into and out of the path of movement of said pressing member, means acting as a guide in positioning the work with relation to the cutting die on the support, and backing material interposed between said pressing member and cutting die, said machine having recesses to receive a portion of the upper in other than flat position.

15. A machine for ornamenting shoe upper material, comprising a movable support for shoe upper material, cutting means mounted on said support, a driven element, pressure applying means connected with said driven element, a driving element for said driven element, a safety clutch mechanism provided with means for preventing actuation of the driven element by the driving element until said work support is in operating position.

16. A machine for ornamenting shoe upper material, comprising a movable support for shoe upper material, cutting means mounted on said support, clutch locking means, a driven element, pressure applying means connected with said driven element, a driving element for said driven element, safety clutch mechanism preventing actuation of the driven element by the driving element until released by the clutch locking means, and means associated with the support to release the clutch locking means as it reaches the limit of its movement to operating position.

17. A machine for ornamenting shoe upper material, comprising a movable support for shoe upper material, cutting means mounted on said support, a driven element, pressure applying means actuated by said movable support in its driving element for said driven element, clutch mechanism for establishing a driving connection between said driving and driven elements and means effected by said movable support in its movement for inhibiting the operation of said clutch mechanism.

18. In a machine for forming openwork in shoe uppers, the combination with a bed, a pressing member, and a cutting out tool, of a work supporting member provided with a top face upon which one of the quarters of a made upper is positioned flatwise for the cutting out operation, and with an end face having a depression therein in which the opposite quarter of the made upper is positioned during the cutting out operation, said pressing and work supporting members being constrained to move relatively in two directions normal to each other.

19. In a machine for forming openwork in shoe uppers, the combination with a bed and a pressing member, a cutting out tool supported other than by the pressing member, of a work supporting member on said bed provided with a work supporting surface elevated above the bed and constructed to provide spaces below the elevated work supporting surface for at least one hand holding the work on the work supporting member.

20. A machine for forming openwork in shoe uppers, and in which the uppers are supported in such a manner that uncut portions of the upper are in other than flat position, including a driven element, a pressing member connected therewith, a driving element, cutting devices, movable work supporting means so shaped and arranged relatively to other parts of the machine that recesses are provided to receive uncut portions of the upper disaligned from the plane of engagement of said cutting devices, and clutch means adapted to engage the driving and driven elements, and means for normally preventing actuation of the clutch.

21. A machine for cutting openwork patterns in limited portions of shoe uppers which have been stitched to form a ring-like piece of work comprising a frame having a base, a presser member operating in said frame toward and away from the base, a die having upstanding cutting edges forming the pattern to be cut in the upper, the width of said die being limited to a dimension enabling it to be inserted within the ring-like structure of the closed upper, and a member for supporting said die upon the base and having a width substantially like that of the die arranged to elevate said die above the base sufficiently to allow that portion of the upper to be cut to be placed in a flattened condition upon the die while the remainder of the ring-like structure of the upper encircles the sides and end of the support-

ing member, said supporting member being constructed to extend from the cutting die to the base of the machine in line with the path of movement of the presser member, thereby to resist the action of the presser member and to insure the rigidity of the support for the die.

22. For use in a machine for cutting designs in shoe upper material having a support, the combination of a cutting die, a base with the die mounted upon the upper portion thereof and having a locating pin and clamping stud extending from the lower portion thereof, said pin formed to project into a hole and said stud into an opening, both the hole and the opening being provided in the support, said pin and stud constructed and arranged to locate and allow the base and die to be clamped on the elevated support, irrespective of the width of the die.

23. For use in a machine for cutting designs in shoe upper material, in which an elevated support is mounted upon the platen of the machine, the combination of a cutting die, a base upon which said die is mounted, locating and clamping means attached to said base and constructed to locate and allow the cutting die and the base to be clamped on the elevated support, irrespective of the width of the die.

24. A perforating machine comprising a frame having fixed platen guides; a reciprocating platen movable in said guides; a fixed bed arranged in a plane substantially at right angles with the path of the platen, and extending under the latter, and an anvil manually movable on the bed and provided with punches adapted to cooperate with the platen, the bed and anvil being provided with complementary guide elements, adapted and arranged to guide the anvil in a path parallel with the plane of the bed, and permit anvils of different widths to be used interchangeably with the bed, without change or adaptation of the guide elements, the frame, the bed, and the anvil being formed and arranged to provide spaces at the opposite sides of the anvil, and below the upper surface thereof for hands holding the work.

25. A perforating machine comprising a frame having fixed platen guides; a reciprocating platen movable in said guides; a fixed bed arranged in a plane substantially at right angles with the path of the platen, and extending under the latter, and an anvil manually movable on the bed and provided with punches adapted to cooperate with the platen, the bed and anvil being provided with complementary guide elements, adapted and arranged to guide the anvil in a path parallel with the plane of the bed, and permit anvils of different widths to be used interchangeably with the bed, without change or adaptation of the guide elements, the frame, the bed, and the anvil being formed and arranged to provide spaces at the opposite sides of the anvil, and below the upper surface thereof for hands holding the work, the bed and the base of the anvil being each extended laterally in opposite directions from said guiding element.

26. A machine for cutting openwork patterns in shoe uppers, comprising a base, lateral supports extending upwardly from said base, a presser member guided for up and down movement between said supports, means for operating said presser member constructed and arranged so that there is a substantial space between the lowermost limit of movement of the presser member and the base of the machine sufficient to allow the insertion of the operator's

hands, a cutting die, and a narrow central support for elevating said die to a position where it will cooperate with the presser member, said die being slidably mounted with respect to the base of the machine to allow it to be moved forward from beneath the presser member to a position to allow the placing of work thereon by the operator and the return of the die and the piece of work to cutting position beneath the presser member where the lateral edges of the work may be held by the operator without danger of crushing the operator's hands.

27. In combination, a cutting die having cutting edges defining a pattern to be cut, a cooperating movable presser member, and a pivoted holddown plate having an opening larger than the pattern to be cut, and arranged to hold a piece of work in position with respect to the die, said holddown plate having means extending to a position out of the range of movement of the presser member whereby an operator may, with safety, depress the holddown against the work.

28. In a die press, the combination with a bed, a pressing member and a cutting-out tool, of a work supporting member constructed to support flatwise one of the quarters of a made upper for the cutting-out operation and to receive the opposite quarters out of the way without buckling the quarter operated upon, said pressing and work supporting members being relatively movable in two directions normal to each other.

29. In a die press, the combination with a bed, a pressing member, and a cutting-out tool, of a work supporting member provided with a top face upon which one of the quarters of a made upper is positioned flatwise for the cutting-out operation and with an end face having a depression therein in which the opposite quarter of the made upper is positioned during the cutting-out operation, said pressing and work supporting members being relatively movable in two directions normal to each other.

30. In a die press the combination with a bed, a pressing member, and a cutting-out tool mounted independent of the pressing member, of a work supporting member provided with a body portion having a rectangular top face, said face having a front edge extending substantially the width of the face and overhanging the body portion of the work supporting member, said overhanging front edge being interposed between the quarters of a made upper during the cutting-out operation.

31. In a die press, the combination with a bed, a pressing member, and a cutting-out tool mounted independent of the pressing member, of a work-supporting member provided with a body portion having a rectangular top face, an end face having a deep depression therein, and side faces having shallower depressions therein.

32. In a die press, the combination with a bed, a pressing member and a cutting-out tool supported other than by the pressing member, of a work supporting member, on said bed, adapted to fit inside of a made shoe upper provided with a work supporting surface, elevated above the bed, upon which the portion of the upper to be operated upon is positioned flatwise, and provided with a depression below the elevated surface in which another portion of the upper may be positioned by at least one hand holding the work on the work support.

33. In a die press, the combination with a bed, a pressing member, a cutting-out tool supported other than by the pressing member, of a work

supporting member on said bed, adapted to fit inside of a made shoe upper, provided with a work supporting surface, elevated above the bed, upon which the portion of the made upper to be operated upon is positioned flatwise and also with a deep depression in its front end face and shallower depressions in its side faces below the elevated surface in which depressions other portions of the upper may be positioned by at least one hand holding the work on the work support.

34. A machine for cutting openwork designs in shoe uppers, according to a process in which said uppers are made up of two or more pieces of flat material attached together with a lining such that the combined pieces cannot be placed in flat position, and without the desired design being cut in said work, comprising a bed, pressure applying means, a work support, a cutting die mounted thereon, said support and die forming an elevated structure supporting in a substantially flat position the portion of the shoe upper to be cut and providing a space for a portion of the upper disaligned from the plane of the cutting action, and not to be cut, thus preventing the buckling of the portion of the upper to be cut, during the cutting operation whereby the desired design is cut through upper and lining in one operation.

35. A machine for cutting openwork designs in shoe uppers, according to a process in which said uppers are made up of two or more pieces of flat material attached together with a lining such that the combined pieces cannot be placed in flat position, and without the desired design being cut in said work, comprising a bed, pressure applying means, a work support, a cutting die mounted thereon, said support and die forming an elevated structure supporting in a substantially flat position the portion of the shoe upper to be cut and providing a space for a portion of the upper disaligned from the plane of the cutting action, and not to be cut, thus preventing the buckling of the portion of the upper to be cut, during the cutting operation whereby the desired design is cut through upper and lining in one operation, said support and die being movable from a work placing to work cutting position.

36. A method of manufacturing shoes which comprises securing upper blanks and lining therefor together to form a non-planiform work piece having the lining thereof attached and in place, supporting said work piece about a cutting die with a portion thereof substantially flatwise, said portion being designed to receive decorative cut outs, and draping the remainder of said work piece about the sides of the die without buckling the portion laid flatwise, and then effecting a penetration of the work piece by the die by means of a press head and thereafter assembling said work piece together with other parts of the shoe.

37. A method of manufacturing shoes which comprises securing upper blanks and lining together to form a non-planiform work piece having the lining thereof attached and in place, supporting said work piece about a cutting die with a portion thereof substantially flatwise, said portion being designed to receive decorative cut outs, and draping the remainder of said work piece about the sides of the die without buckling the portion laid flatwise, then moving the assembled die and work piece into a position for press operation thereon, then striking the assembled parts a blow to effect a penetration of the work by the die, and then assembling the said work piece together with other parts of the shoe.

38. A method of manufacturing shoes which

comprises securing upper blanks and lining together to form a non-planiform work piece having the lining thereof attached and in place, supporting said work piece about a cutting die with
 5 a portion thereof substantially flatwise, said portion being designed to receive decorative cut outs, and draping the remainder of said work piece about the sides of the die without buckling the portion laid flatwise, gauging the position of
 10 the said work piece with reference to the die, then moving the assembled die and work piece into a position for press operation thereon, then striking the assembled parts a blow to effect a penetration of the work by the die, and then assembling the said work piece together with other
 15 parts of the shoe.

39. A method for manufacturing shoes which comprises securing upper blanks and lining together to form a non-planiform work piece having the lining thereof attached and in place, supporting said work piece with a portion thereof
 20 flatwise, said portion designed to receive cut outs,

and draping the remainder of said work piece about the sides of the support, said support having a previously determined relation to the die, locating the said work piece upon said support with reference to the die, and thereupon striking
 5 the assembled and relatively located parts a blow with a press head to effect a penetration of the work piece by the die.

40. A method of manufacturing shoes which comprises forming a lined, fitted upper, closing
 10 same into a ring-like form, supporting same with a portion thereof held flatwise in proximity to an ornamenting medium, and with the remainder thereof draped and positioned to avoid buckling of the flatwise portion, accurately positioning
 15 said flatwise portion with respect to said ornamenting medium, whereby said portion may be ornamented, and thereafter causing said ornamenting medium to operate upon the flatwise portion, by applying a blow thereto as a machine
 20 operation.

BENJAMIN W. FREEMAN.

CERTIFICATE OF CORRECTION.

Reissue No. 20,203.

December 8, 1936.

BENJAMIN W. FREEMAN.

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows: Page 10, first column, line 17, claim 17, for the words "affected by said movable support in its" read connected with said driven element, a; and that the said Letter Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 26th day of January, A. D. 1937.

(Seal)

HENRY VAN ARSDALE,
Acting Commissioner of Patents.

[fol. 204] Mr. Allen: I would like to have anvil die with mask, Plaintiffs' Exhibit X in case 8962 before this Court, marked in the present case as Plaintiffs' Exhibit No. 13; and as Plaintiffs' Exhibit No. 14, the shoe upper marked "Plaintiffs' Exhibit Q" in case 8962.

(The said anvil die with mask, and the shoe upper, were marked by the reporter as Plaintiffs' Exhibits Nos. 13 and 14, respectively.) (Physical Exs.)

Mr. Allen: I would like to have marked in this case as Plaintiffs' Exhibit No. 15, Plaintiffs' Exhibit J in case 8962.

(The said shoe upper was marked by the reporter as Plaintiffs' Exhibit No. 15.)

Mr. Allen: I would like to offer in evidence as Plaintiffs' Exhibits Nos. 16 and 17 two diagrams of the defendants' Model T machine, being ones used in presentation of appeal No. 9,602 to the Court of Appeals.

Mr. Rogers: Let the record show that they go in as being Plaintiffs' concept of the operation, and not as evidence of what the machine is.

Mr. Allen: That is correct. I offered them as diagrams [fol. 205] which we had introduced before the Court of Appeals.

(The said diagrams were marked by the reporter as Plaintiffs' Exhibits Nos. 16 and 17, respectively.)

Plaintiffs' Exhibits Nos. 16 and 17 offered in evidence.

Plaintiffs' Exhibit 16.

Div. 16, 17, 18, of the
I.L.R. 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

Freeman

Alvord

Plffs.

16 Fms

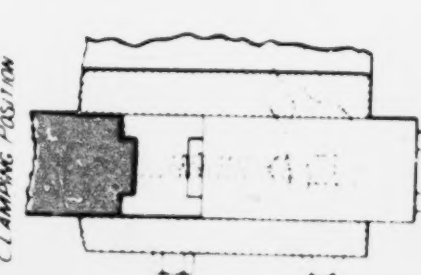
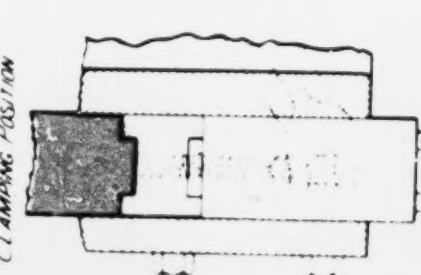
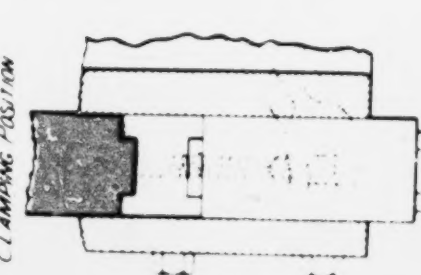
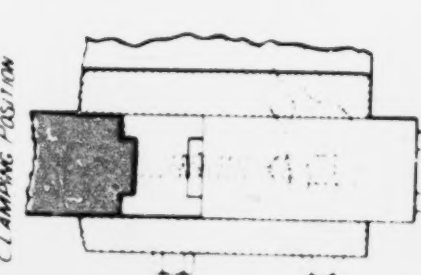
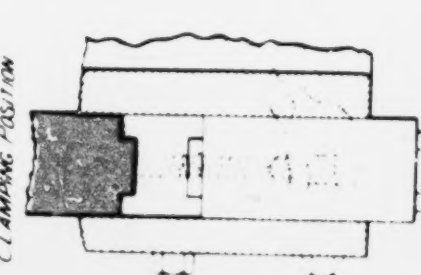
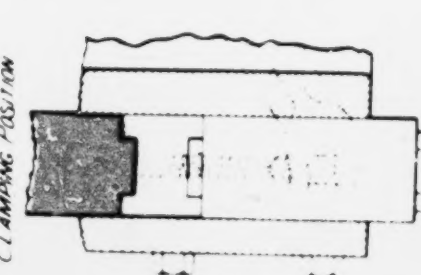
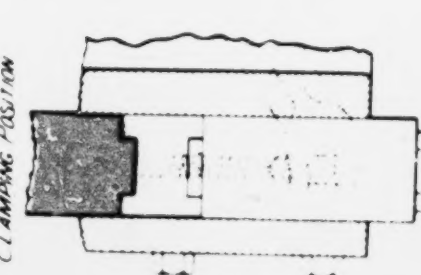
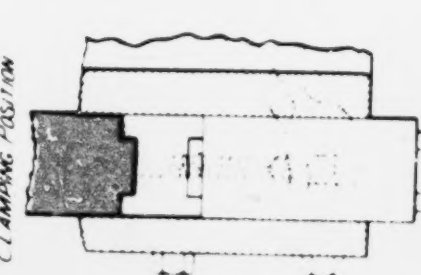
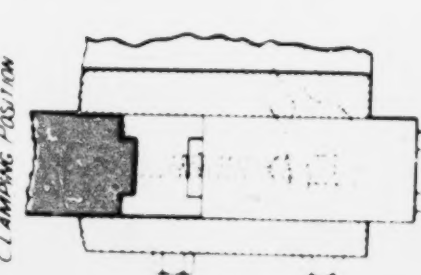
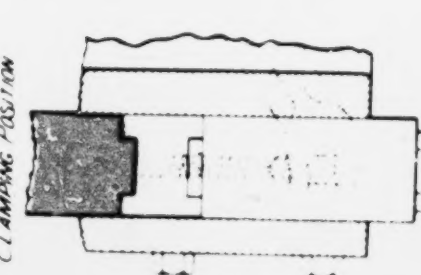
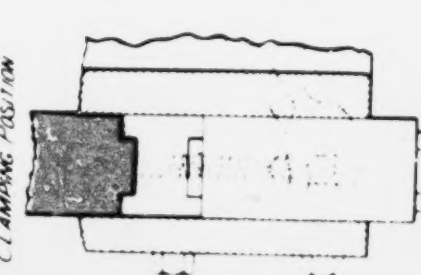
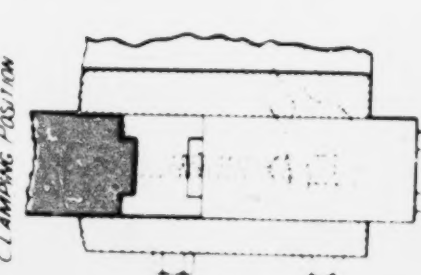
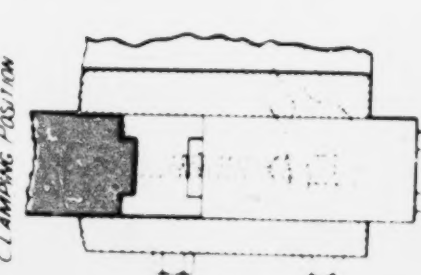
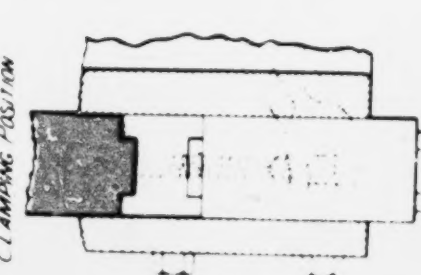
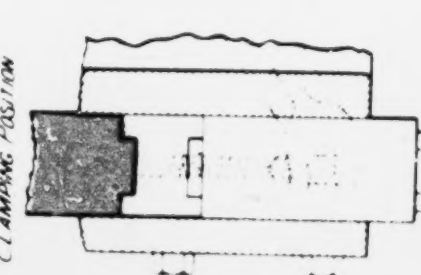
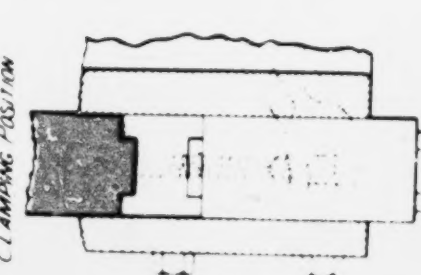
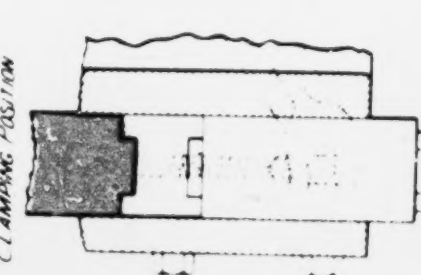
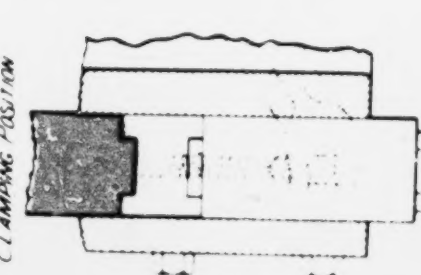
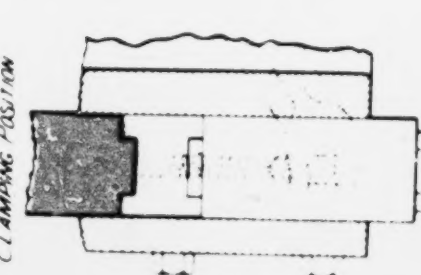
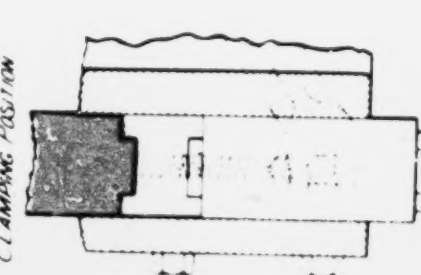
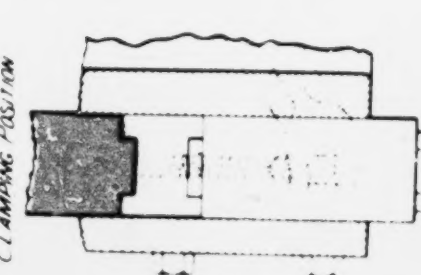
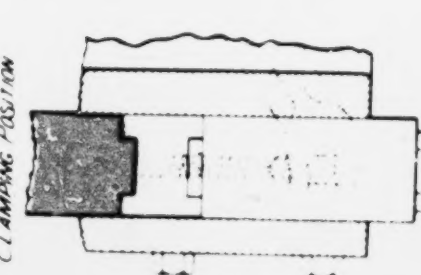
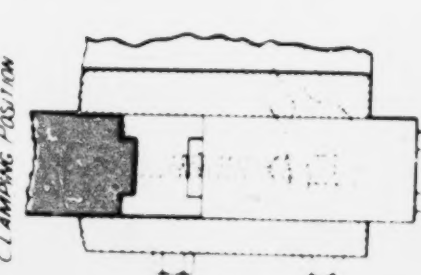
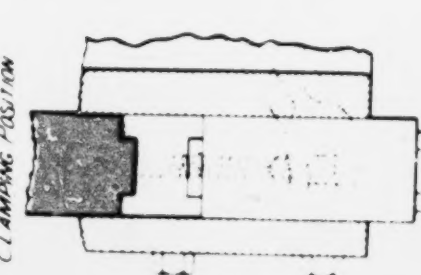
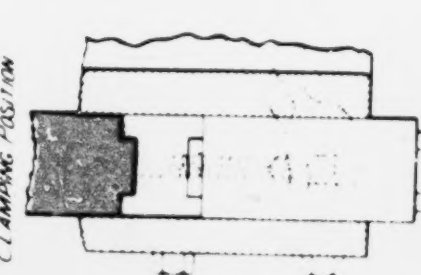
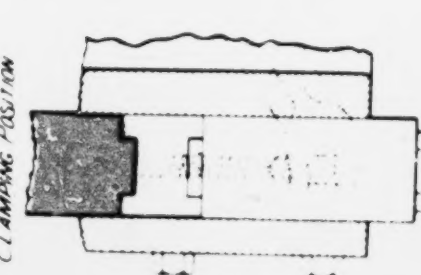
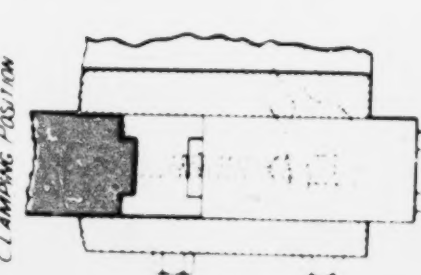
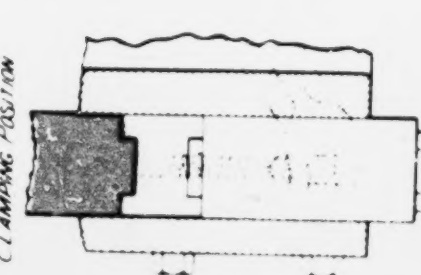
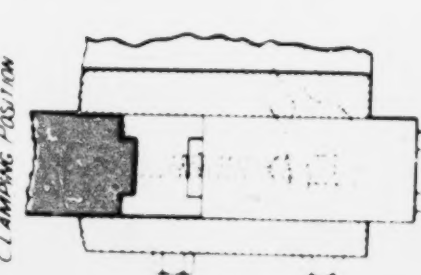
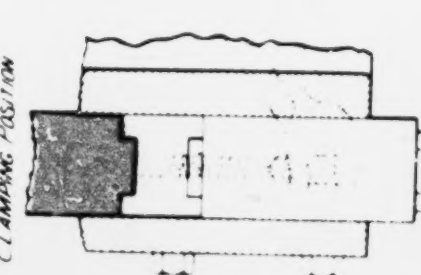
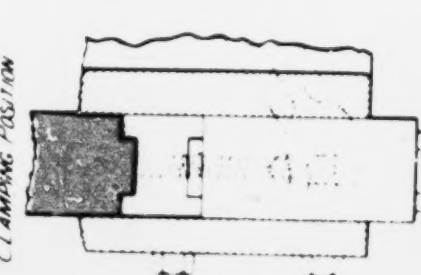
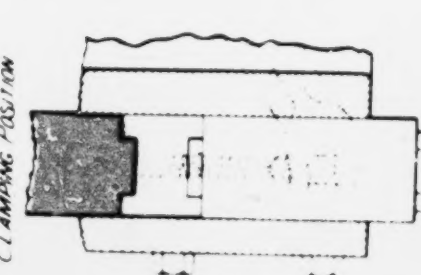
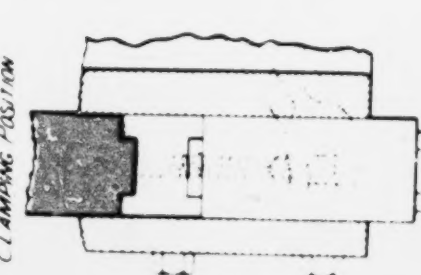
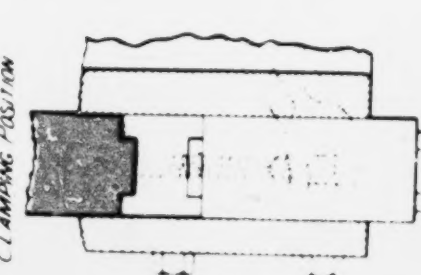
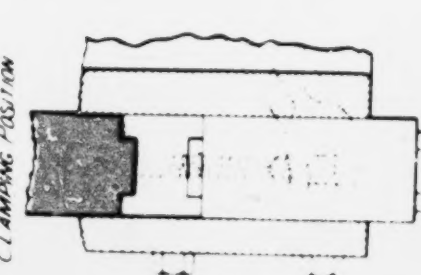
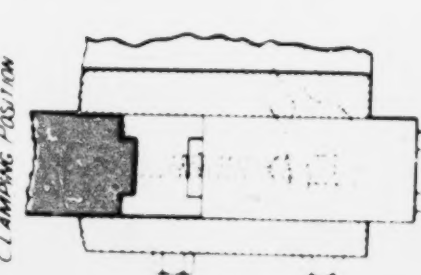
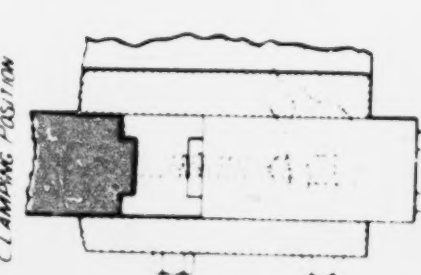
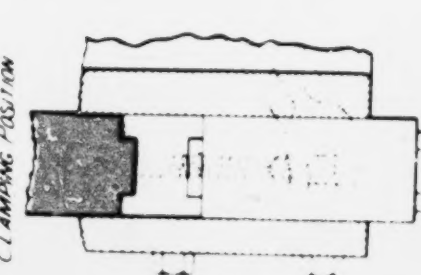
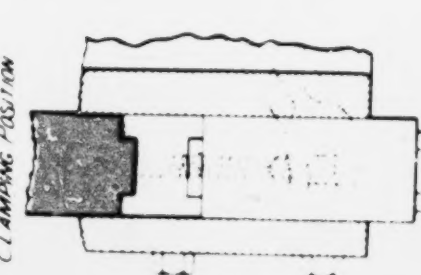
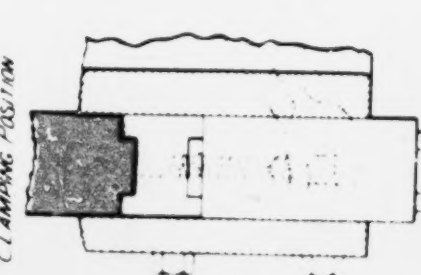
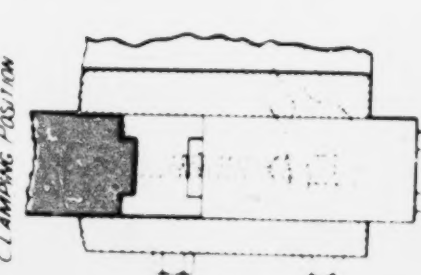
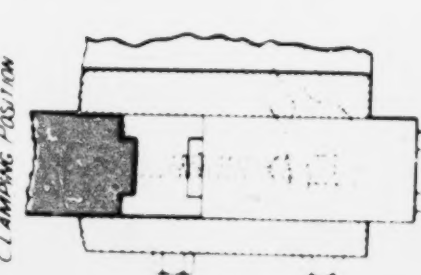
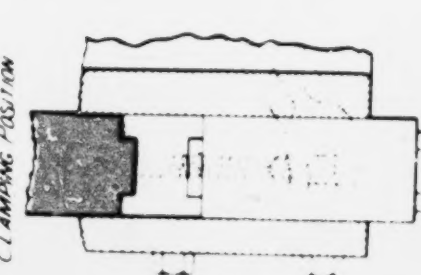
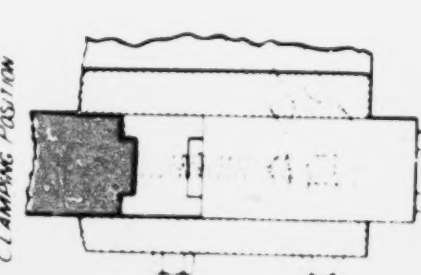
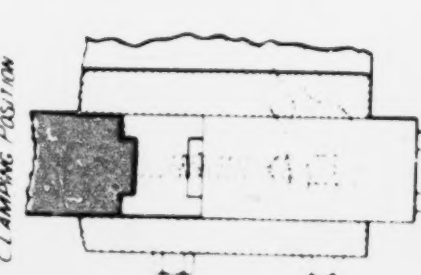
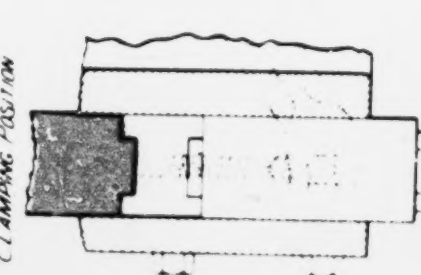
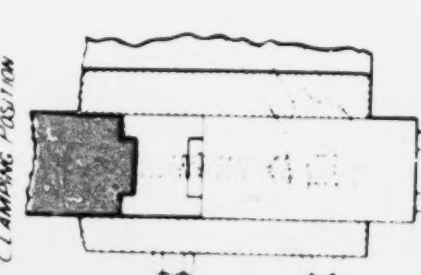
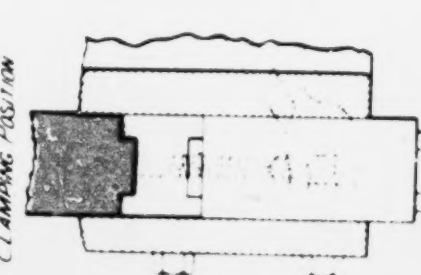
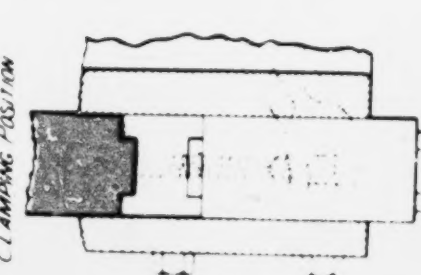
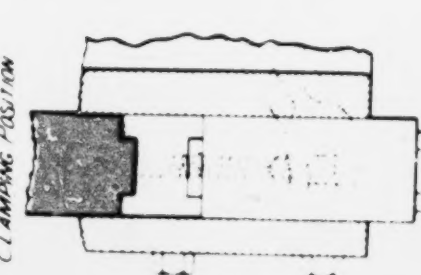
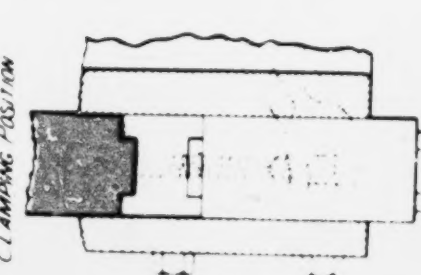
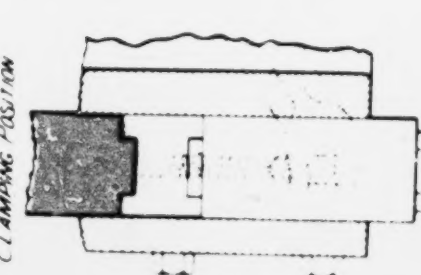
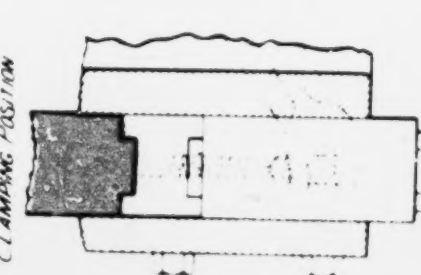
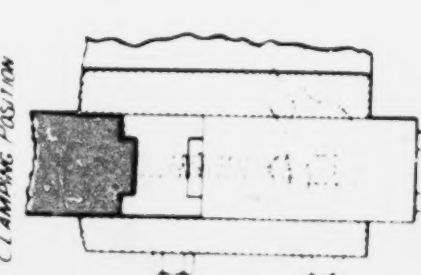
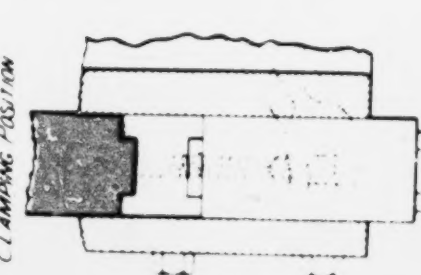
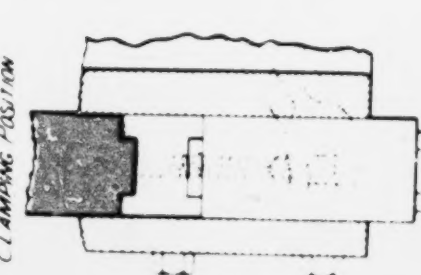
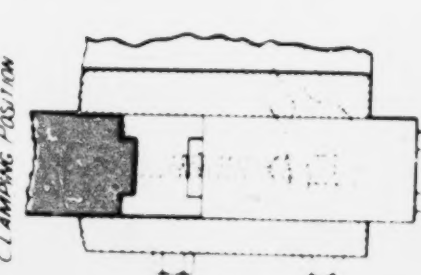
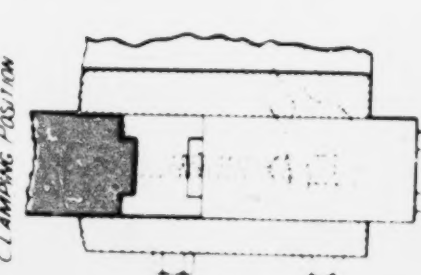
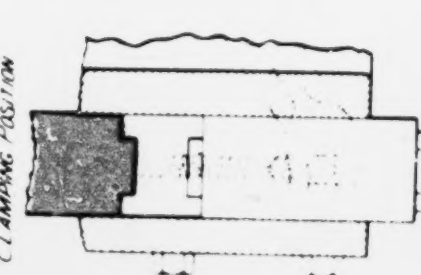
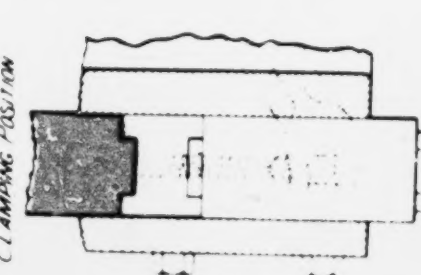
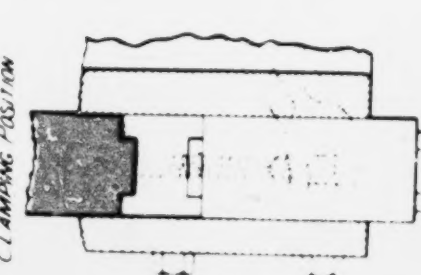
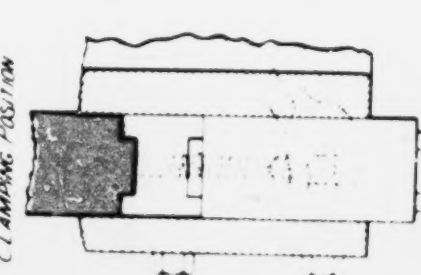
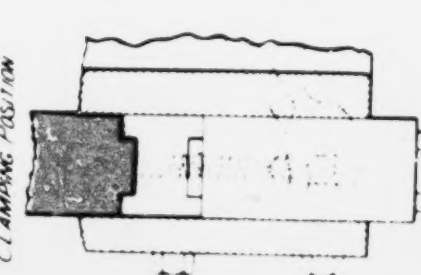
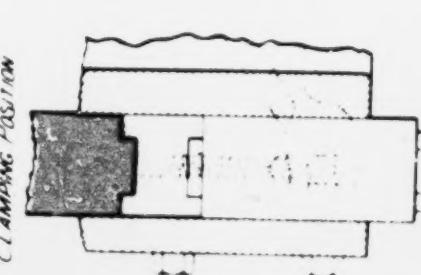
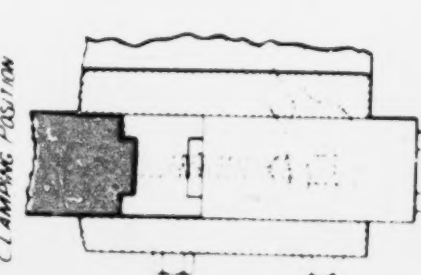
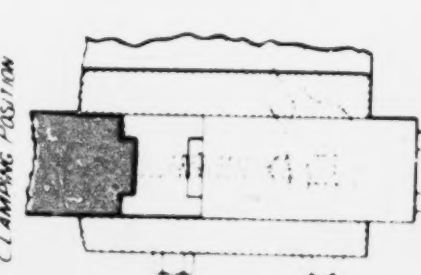
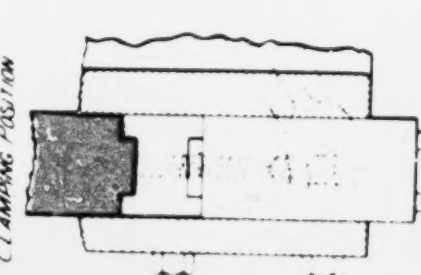
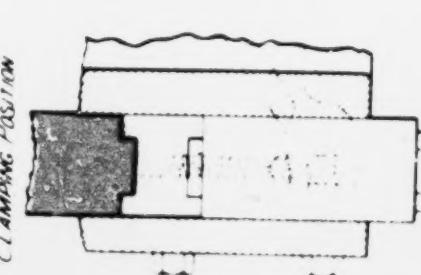
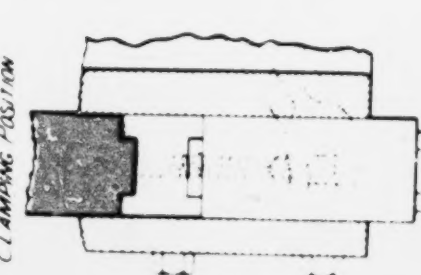
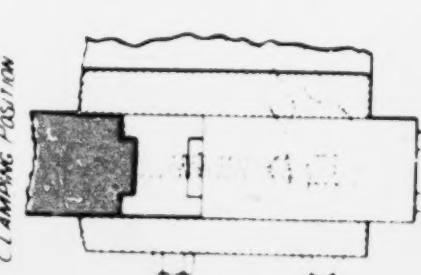
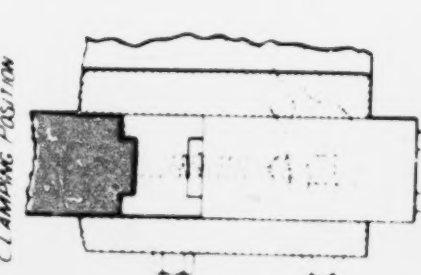
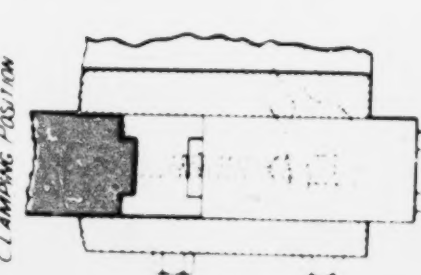
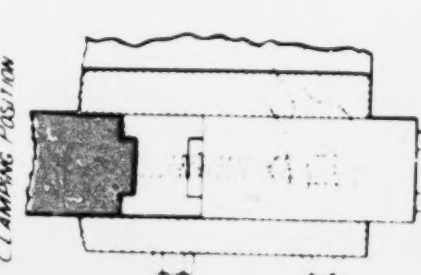
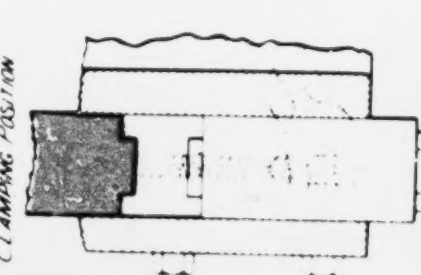
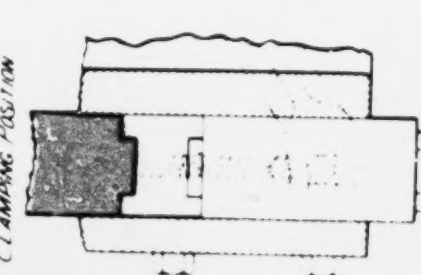
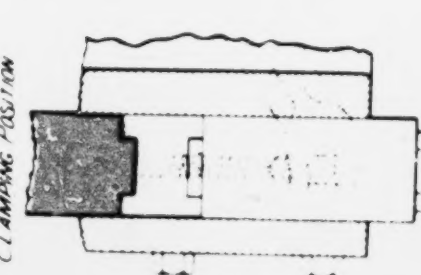
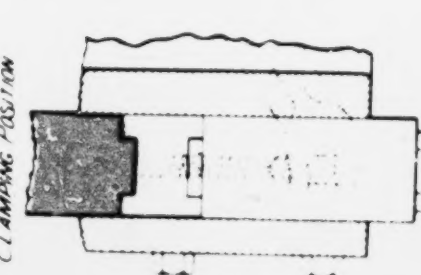
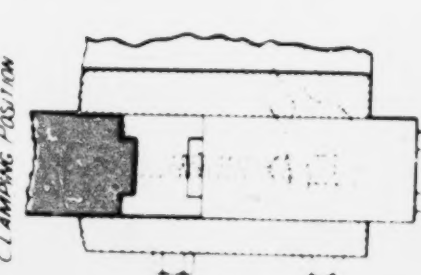
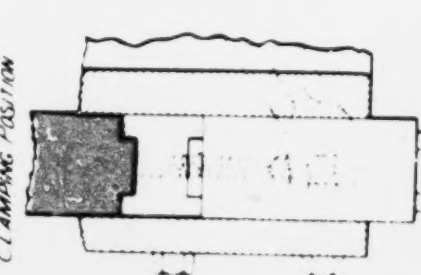
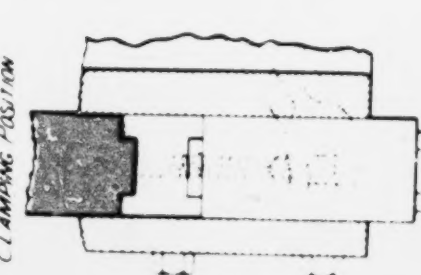
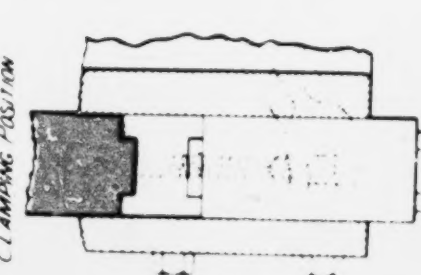
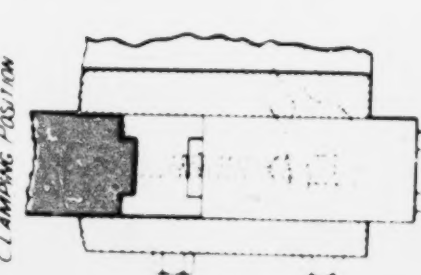
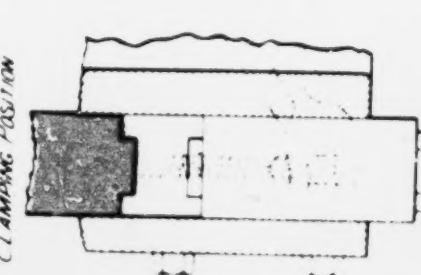
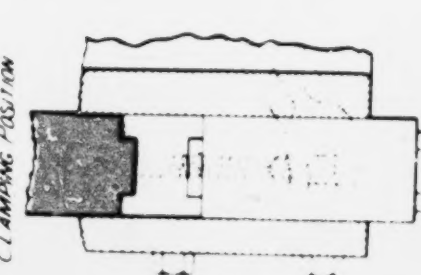
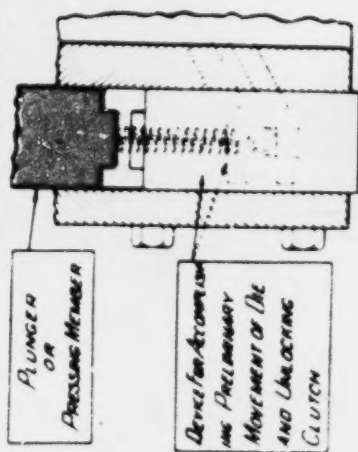
MODEL T MACHINE - WITH SPACING OF MASK
SLIGHTLY EXAGGERATED TO ILLUSTRATE OPERATION

INOPERATIVE POSITION

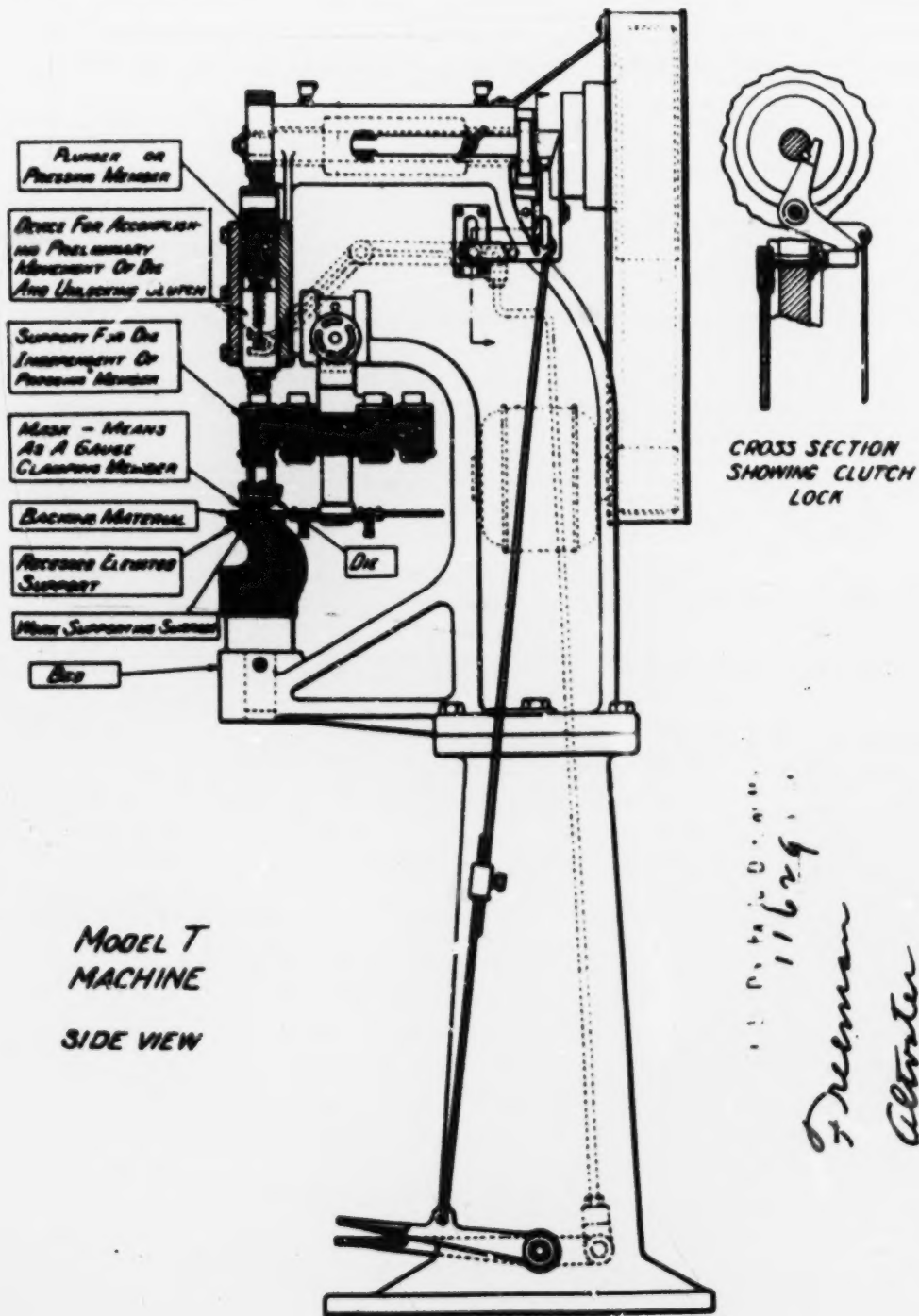
WORK ADJUSTING POSITION

CLAMPING POSITION

CUTTING OPERATION



Plaintiffs' Exhibit 17.



205d

(Recess, five minutes.)

Mr. Allen: Now I offer in evidence as Plaintiffs' Exhibit No. 18 flat bed die with mask. It is stipulated that this particular die was Premier die involved in the Premier suit.

Mr. Kingsland: I assume that is true, because it follows generally the picture of it in the Premier record that is before the Court here.

Mr. Allen: Yes. Well, it is offered as illustrative of these things, that is what I am offering it for.

(The said flat bed die was marked by the reporter as Plaintiffs' Exhibit No. 18.)

Plaintiffs' Exhibit No. 18 offered in evidence. (Physical Ex.)

Mr. Allen: Now, counsel has stated that he will not agree to our introduction of this piece of work without testimony, so I make this offer: I offer as Plaintiffs' Exhibit No. 19 a piece of work showing the Plaintiffs' conception of a piece of work to be used with the die, Plaintiffs' Exhibit No. 13.

[fol. 206] Mr. Kingsland: Now, if the Court please, I cannot agree to that, because I have no information with respect to that work, and as the case will develop the Court will find that the particular type of work has some real significance in the interpretation of the claims in the light of the Court of Appeals' opinion, so I am objecting to the offer of the piece of work as not proof.

The Court: Overrule the objection.

(The said piece of work was marked by the reporter as Plaintiffs' Exhibit No. 19.)

Plaintiffs' Exhibit No. 19 offered in evidence.

Mr. Allen: Now, in connection with our argument of the summary judgment matter, certain exhibits were marked as attached to affidavits, and I would like to have marked in evidence in this case on final hearing copy of Exhibit E on summary hearing, being defendants' petition for leave to file a bill in the nature of a bill of review, as Plaintiffs' Exhibit No. 20.

(The said document was marked by the reporter as Plaintiffs' Exhibit No. 20.)

Plaintiffs' Exhibit No. 20 offered in evidence. (Physical Ex.)

(Plaintiffs' Exhibit 20 not reproduced in printed record at this place pursuant to Order of U. S. Circuit Court of Appeals of March 10, 1942.)

Mr. Allen: As Plaintiffs' Exhibit No. 21, I offer Exhibit F on summary hearing being plaintiffs' affidavit record in the Court of Appeals on the proposed bill of [fol. 207] review.

(The said document was marked by the reporter as Plaintiffs' Exhibit No. 21.)

Plaintiffs' Exhibit No. 21 offered in evidence. (Physical Ex.)

(Plaintiffs' Exhibit 21 not reproduced in printed record at this place pursuant to Order of U. S. Circuit Court of Appeals of March 10, 1942.)

Mr. Allen: I would also like to offer in evidence, supplementing the last two exhibits, as Plaintiffs' Exhibit No. 22, copy of plaintiffs' answer to petitioners' suggestions in support of a petition for leave to file a bill in the nature of a bill of review, same being our brief in the Court of Appeals on this matter of bill of review.

(The said document was marked by the reporter as Plaintiffs' Exhibit No. 22.)

Plaintiffs' Exhibit No. 22 offered in evidence. (Physical Ex.)

(Plaintiffs' Exhibit 22 not reproduced in printed record at this place pursuant to Order of U. S. Circuit Court of Appeals on March 10, 1942.)

Mr. Allen: And copy of reply memorandum and affidavit for petitioners filed by the defendants in the proceeding in the Court of Appeals as plaintiffs' Exhibit No. 23.

(The said document was marked by the reporter as Plaintiffs' Exhibit No. 23.)

Plaintiffs' Exhibit No. 23 offered in evidence. (Physical Ex.)

(Plaintiffs' Exhibit 23 not reproduced in printed record at this place pursuant to Order of U. S. Circuit Court of Appeals of March 10, 1942.)

Mr. Allen: I would like to offer in evidence copy of the printed record in the case of Premier Machine Company against Benjamin W. Freeman, in the United States Circuit Court of Appeals of the First Circuit, as shown in [fol. 208] the proceedings before that Court, leading to its opinion. In other words, we don't offer this for the truth of anything, but simply for showing what was before the Court. Offered as Plaintiffs' Exhibit No. 24.

(The said document was marked by the reporter as Plaintiffs' Exhibit No. 24.)

Plaintiffs' Exhibit No. 24 offered in evidence. (Physical Ex.)

(Plaintiffs' Exhibit 24 not reproduced in printed record at this place pursuant to Order of U. S. Circuit Court of Appeals of March 10, 1942.)

Mr. Allen: I have certain papers here, Your Honor, which are in Your Honor's files now, in case No. 8962, but I thought if we had copies in this case, it would save files in our two cases. They are not certified copies, however. I offer them subject to correction, if such should be made to appear. We offer in evidence as Plaintiffs' Exhibit No. 25 a copy, subject to correction, if such should be made to appear, of the document now in the file in Equity case No. 8962 before this Court, entitled "Disclaimer as to injunction." And I have not had these papers certified, Your Honor, because they were in your files, and I did not deem it necessary.

(The said document was marked by the reporter as Plaintiffs' Exhibit No. 25.)

Plaintiffs' Exhibit No. 25 offered in evidence.

[fol. 209] (Plaintiffs' Exhibit 25.)

Disclaimer as to Injunction.

(Filed April 9, 1937.)

In the District Court of the United States
Eastern District of Missouri
Eastern Division

Benjamin W. Freeman and The
Louis G. Freeman Company,
Plaintiffs,

vs.

A. W. Altvater and Western
Supplies Company,
Defendants.

In Equity No. 8962

Now come the plaintiffs in the above-entitled cause and represent that since the granting of the decree in this cause dated February 28, 1934, the Letters Patent upon which was based the contract involved in this cause, to-wit: U. S. Letters Patent No. 1,681,033, have been surrendered to the United States Patent Office and in its place two Reissue Letters Patent were granted, to-wit: Reissue Letters Patent No. 20,202 and 20,203, both on December 8, 1936, and plaintiffs further represent that claims 34, 46, 87, 53, and 36 of Letters Patent No. 1,681,033 are identical with claims 10, 19, 32, 20 and 12, respectively, of said Reissue Letters Patent No. 20,203 and that claims 18 and 19 of said Letters Patent No. 1,681,033, are identical with claims 6 and 7 of Reissue Letters Patent No. 20,202.

Wherefore, pursuant to Revised Statutes of the United States, Section 4916 (U. S. C. A. Title 35, Sec. 64) as [fol. 210] amended, the plaintiffs disclaim from the decree aforesaid any rights to a continuing injunction except insofar as the monopoly of said Letters Patent No. 1,681,033, is continued and preserved by said Reissue patents No.

20,202 and 203 and more particularly as to claims 10, 12, 19, 30 and 32 of Reissue Letters Patent No. 20,202 and claims 6 and 7 of said Reissue Letters Patent No. 20,202.

BENJAMIN W. FREEMAN, and
THE LOUIS G. FREEMAN COMPANY,

ALLEN & ALLEN,

By BRUNINGA AND SUTHERLAND,
Attorneys.

St. Louis, Mo.
Apr. 1937.

[fol. 211] Mr. Allen: I now offer in evidence as Plaintiffs' Exhibit No. 26, a ruling of the Court of Appeals dated December 7, 1937, on the petition of appellees for leave to file a bill in the nature of a bill of review. A certified copy of that appears in your Honor's files.

(The said document was marked by the reporter as Plaintiffs' Exhibit No. 26.)

Plaintiffs' Exhibit No. 26 Offered in Evidence.

[fol. 212] (Plaintiffs' Exhibit 26.)

(Order denying Petition for leave to file in District Court a Bill in the Nature of a Bill of Review.)

United States Circuit Court of Appeals
Eighth Circuit.

No. 9602 November Term, 1937.

Benjamin W. Freeman, et al.,	}	Appeal from the District Court of the United States for the Eastern District of Missouri.
Appellants,		
vs.		
A. W. Altvater, et al.		

This cause came on to be heard on the petition of Appellees for leave to file in the District Court a bill in the nature of a bill of review, the suggestions in support thereof, the affidavit of the appellant Benjamin W. Freeman concerning proposed bill of review, answer to sugges-

tions in support of petition and reply memorandum and affidavit for petitioners, and was argued by counsel.

Said matters having been considered, It is now here ordered by this Court that said petition for leave to file be, and the same is hereby, denied.

December 7, 1937.

Approved for the Court:

KIMBROUGH STONE,
Presiding Judge.

[fol. 213] Mr. Allen: Offer in evidence as Plaintiffs' Exhibit No. 27 copy of the decree on mandate in case No. 8962, signed by your Honor and filed February 26, 1934.

(The said document was marked by the reporter as Plaintiffs' Exhibit No. 27.)

Plaintiffs' Exhibit No 27 Offered in Evidence.

[fol. 214] (Plaintiffs' Exhibit 27.)

Decree.

In the District Court of the United States,
For the Eastern Judicial District of Missouri,
Eastern Division.

Benjamin W. Freeman, and The Louis
G. Freeman Company,

Plaintiffs,

v.

A. W. Altvater, and The Western Sup-
plies Company,

Defendants.

No. 8962
In Equity.

This cause coming on to be heard pursuant to Mandate of the Circuit Court of Appeals reversing the decree of this Court dismissing the Bill of Complaint and instructing the Court to take such further proceedings as were called for not inconsistent with the opinion of the Court, and to enter a decree in favor of the plaintiffs, it is hereby ordered, adjudged and decreed:

(1). That the contract of January 1, 1929, a copy of which is attached to the Bill of Complaint in this cause, is continuing and in full force between the parties, and that the defendants have committed a breach of said contract by manufacturing and placing with shoe manufacturers a certain infringing machine falling within the monopoly of Freeman patent No. 1,681,033, exemplified by the machine illustrated in plaintiffs' Exhibits D, E, G, and H, and introduced in evidence as Plaintiffs' Exhibit I, and referred to in the evidence as Model T machine, and by the sale of dies, anvils and masks for use thereon, and dies and masks as exemplified by the dies and masks illustrated in plaintiffs' Exhibit F, and as per plaintiffs' physical Exhibit HH1.

[fol. 215] (2). That the defendants and each of them, their employees, agents, servants, workmen and attorneys and the officers of the corporate defendant, are hereby enjoined from any conduct inconsistent with the terms and obligations of said contract.

(3). That the defendants and each of them, their employees, agents, servants, workmen and attorneys and the officers of the corporate defendant, are hereby restrained and enjoined from making and selling, or placing in the hands of shoe manufacturers, machines falling within the monopoly of Freeman patent No. 1,681,033, particularly claims 18, 19, 32, 34, 36, 46, 53, and 87 thereof.

(4). That the defendants and each of them, their employees, agents, servants, workmen and attorneys, and the officers of the corporate defendant, be and are hereby enjoined from making and selling, or placing in the hands of shoe manufacturers, dies, anvils, and masks, or any of them, falling within the monopoly of the Freeman patent No. 1,681,033, particularly claims 18, 19, 32, 34, 36, 46, 53, and 87 thereof, except in accordance with the said contract, or dies for use on machine or machines falling within the monopoly of said claims, unless such machines are or shall be licensed under the said Freeman patent, and then only when the terms of said contract are fully complied with.

[fol. 216] (5). That plaintiffs do recover from the defendants the damages caused to the plaintiffs and each of them,

and suffered by them and each of them, arising from the breach of contract herein, arising out of the manufacture and sale or other disposition of said Model T machine and machines falling within the monopoly of said Freeman patent, and particularly claims 18, 19, 32, 34, 36, 46, 53, and 87 thereof, and the manufacture and sale or other disposition of dies, anvils and masks, or any one of them, for use thereon; and the manufacture, sale or other disposition of dies, anvils and masks, or any one of them, falling within the monopoly of said Freeman patent, and particularly claims 18, 19, 32, 34, 36, 46, 53 and 87 thereof, but not accounted for pursuant to said contract; that this cause be referred to Bruce Elliott, Esquire, as Master, to take and state an account of said damages, and to report thereon to this Court; and the defendants and each of them, their employees, agents, servants, workmen and attorneys and the officers of the [coporate] defendant, and each of them, are hereby directed to attend before said Master from time to time as required and to produce such books, statements, vouchers and other documents and exhibits as they may be required or directed to produce, and to submit to such oral or other examination as the Master may direct.

(6). That the defendants pay to the plaintiffs the plaintiffs' costs to be taxed, and that the plaintiffs have judgment therefor.

CHARLES B. DAVIS,
United States District Judge.

Endorsed: Filed Feb. 26, 1934 Jas. J. O'Connor, Clerk.

[fol. 217] Mr. Allen: As showing the proceedings in the case of Western Supplies Company and Arthur W. Altwater against Benjamin W. Freeman and the Louis G. Freeman Company, in cause No. 1015 in the United States District Court for the Southern District of Ohio, I offer in evidence as Plaintiffs' Exhibit No. 28 a copy of the printed record in the United States Circuit Court of Appeals.

(The said document was marked by the reporter as Plaintiffs' Exhibit No. 28.)

Plaintiffs' Exhibit No. 28 offered in evidence. (Physical Ex.)

(Plaintiffs' Exhibit 28 not reproduced in printed record at this place pursuant to Order of U. S. Circuit Court of Appeals of March 10, 1942.)

[fol. 218] Mr. Allen: May I call the Court's attention to paragraph 5 of the Bill of Complaint, in which we say:

"Plaintiffs having only then had the matter brought to their attention, did duly notify the defendants that they were manufacturing and selling flat bed dies with masks upon which no reports of royalties pursuant to said contract had been made, and demanding that said be accounted for, that as a result of extended correspondence with relation thereto and conferences thereon, defendants did agree to refrain from further sale of the said dies complained of by the plaintiffs, to-wit, the so-called clamp and elevated gauge dies, but that shortly after entering the said agreement, the defendants did in spite of the same, continue and has since continued to manufacture and sell said dies."

In support of those allegations, I, yesterday, called to the attention of counsel correspondence beginning with a letter of December 16, 1931 to the Western Supplies Company, from Louis G. Freeman Company, Benjamin W. Freeman. I ask you if—

Mr. Kingsland: (Interrupting) I have no objection to that, because that is simply a notice.

Mr. Allen: Reply to the same, received from you, [fol. 219] from Rippey and Kingsland, dated December 22, 1931.

Mr. Kingsland: I have no objection to that.

Mr. Allen: A letter from Rippey and Kingsland, dated January 9, 1932.

Mr. Kingsland: That is all right.

Mr. Allen: Letter of January 19, 1932 from Louis G. Freeman Company, Benjamin W. Freeman, to Messrs.

Ripsey and Kingsland. Letter of January 20, 1932 from Ripsey and Kingsland to Louis G. Freeman Company. A letter of April 1, 1932, to Messrs. Ripsey and Kingsland from me.

Mr. Kingsland: Now, I think that that letter is a part of an effort to reach a settlement of this controversy, and I am satisfied that it was a part of such conference, and as such, being evidence relating to a compromise, is not admissible, as I submit.

Mr. Allen: Well, the only purpose—

Mr. Kingsland: (Interrupting) And that is also true with respect to the following letter.

Mr. Allen: The only purpose of the first letter is to explain the letter of April 5, 1932, which was the one that I wanted to introduce. Perhaps the Court would like to look at the letter.

The Court: All right. You gentlemen know better than I do.

(The Court examines the said letter.)

[fol. 220] Mr. Allen: I consider that those are not argumentative matters. They are statements of flat propositions.

The Court: Overrule the objection.

Mr. Allen: Copy of letter, May 11, 1933, from Allen and Allen to Ripsey and Kingsland. And letter of May 16, 1933, from Ripsey and Kingsland to Allen and Allen.

Mr. Kingsland: Aren't you going to put in those letters or correspondence?

Mr. Allen: Yes, I will put in the letter also of February 3, 1932, if you wish. I think that completes it.

(Here ensued a colloquy off the record.)

Mr. Allen: Is it agreeable that photostats of those letters may be substituted for the originals?

Mr. Kingsland: Yes, sir.

Mr. Allen: I will get positive photostats of these, Your Honor, and substitute them for the black ones.

In addition to the letters, the dates of which I have already referred to in my statement, I ask to include letter dated February 19, 1932, to the Western Supplies Company from B. W. Freeman.

I offer now in evidence the letters as Plaintiffs' Exhibit No. 29, letter A to K, as follows:

December 16, 1931, 29-A;
 December 22, 1931, 29-B;
 [fol. 221] January 9, 1932, 29-C;
 January 19, 1932, 29-D;
 January 20, 1932, 29-E;
 February 3, 1932, 29-F;
 February 19, 1932, 29-G;
 April 1, 1932, 29-H;
 April 5, 1932, 29-I;
 May 11, 1933, 29-J;
 May 16, 1933, 29-K.

It is stipulated that photostats of this correspondence may be introduced instead of the originals, and that the letters were respectively sent and received by the parties named therein.

Mr. Kingsland: That is correct.

(The said photostats were later delivered to the reporter and by him marked as Plaintiffs' Exhibits Nos. 29-A to 29-K, respectively.)

Plaintiffs' Exhibits Nos. 29-A, 29-B, 29-C, 29-D, 29-E, 29-F, 29-G, 29-H, 29-I, 29-J, and 29-K, offered in evidence.

[fol. 222] (Plaintiffs' Exhibit 29-A.)

December 16, 1931

Western Supplies Company
 2920 Cass Avenue
 St. Louis, Missouri

Gentlemen:

It has come to our attention that you have been making and selling flat bed dies with masks since January 1, 1929, which have not been reported.

Besides those you have made for the St. Louis territory, you have also shipped some outside your licensed territory.

Please check this up at once sending us a report along with the royalty due.

Very truly yours

THE LOUIS G. FREEMAN CO.

BENJ. W. FREEMAN

BWF:SDM

[fol. 223] (Plaintiffs' Exhibit 29-B.)

St. Louis December 22, 1931

The Louis G. Freeman Co.
Cincinnati
Ohio.

Gentlemen:—

Western Supplies Co. has handed to us your two letters dated December 16 and 21, in relation to a flat bed die which you allege to be within the contract.

Mr. Altvater has turned these papers over to us today, together with a model of the die and we will make an immediate examination of the matter and let you know our conclusions.

Very truly yours,

RIPPEY & KINGSLAND.

2-S

[fol. 224] (Plaintiffs' Exhibit 29-C.)

St. Louis, January 9, 1932.

The Louis G. Freeman Co.
Cincinnati
Ohio.

Gentlemen:—

We have examined the flat bed dies made by Western Supplies Co. which we assume are the ones that you have in mind and which we understand you consider are within the terms of the license agreement.

The form of die made by Western Supplies Co. for the flat bed machine that has a vertically movable plate positioned above the work support is so different in construction from the mask of the Freeman patent that it is our opinion, and we have so advised Western Supplies Co., that it is not within the monopoly of the patent.

Moreover, we have in our possession a die equipped with a movable plate which is substantially identical with a die now being manufactured by the Western Supplies Co. The die which we refer to is one that was made and used more than two years before the application for the Freeman patent was filed. We do not see how it would be possible to read any of the claims of the Freeman patent on the present structure of flat bed die made by the Western Supplies Co. in view of this prior structure.

In view of this situation, we suggest that if you expect to be in St. Louis shortly you let us know and we will be glad to go over this matter with you personally, or if you would authorize Mr. Bruninga to take the matter up we should be glad to discuss it with him. We feel very sure when we have shown you this prior construction, which is substantially identical with the present Western construction, that you will not desire to press any contention that the present Western structure is within the monopoly of the Freeman patent.

Very truly yours,

RIPPEY & KINGSLAND.

2-s

[fol. 225] (Plaintiffs' Exhibit 29-D.)

January 19, 1932

Messrs. Rippey & Kingsland
Rialto Building
St. Louis, Missouri

Gentlemen:

We have your letter of January 9 and last Friday, January 15, we stopped at your office to see the two dies that you have referred to in your correspondence.

I would like for Mr. Allen to see these dies and could you send these to him?

In case you should object to sending the old die, we could probably explain this pretty well to Mr. Allen if we had some photos, but there appears to be no reason why you might object to sending the model die.

If you hesitate to send the old die, could it be arranged for Mr. Bruninga to have some photographs made of this die?

Very truly yours,

THE LOUIS G. FREEMAN CO.,
BENJ. W. FREEMAN.

BWF:SDM

[fol. 226] (Plaintiffs' Exhibit 29-E.)

St. Louis January 20, 1932.

The Louis G. Freeman Co.
Attention: Mr. Benj. W. Freeman
Cincinnati, Ohio.

Gentlemen:

We acknowledge receipt of your letter of January 19th, and have talked with Mr. Altvater about forwarding to you the old die as well as samples of the new die. The Western Supplies Co. will make shipment direct to you of these dies for examination by Mr. Allen and yourselves.

After they have served your purpose, will you please see that they are returned either to us or to the Western Supplies Co.?

When you have made an examination of these dies, we shall be glad to discuss the matter with you further if you see any purpose in so doing.

Very truly yours,

RIPPEY & KINGSLAND.

2-Q

[fol. 227] (Plaintiffs' Exhibit 29-F.)

Feb. 3, 1932.

Messrs. Rippey & Kingsland,
Rialto Bldg.,
St. Louis, Mo.

Gentlemen:

With regard to the matter of the flat bed dies which you submitted to us, we have examined them and discussed them with Mr. Freeman.

As to the old imitation vamp perforating die, it would appear from what he tells us that the sheet metal apron which extends back from the die has been slit along both edges, for what reason we have not been able to determine fully. At least Mr. Freeman has known of such devices, but has never seen one with the two slits.

This leads us to raise the question of when the slits were made. The bottom of the apron shows some fresh file marks, and we do not see why they were made either.

Mr. Freeman also tells us that the device, such as the said old vamp die, was never moved into and out of work cutting position, and he points to a threaded hole in the base of the die whereby the die was fastened in place.

Taking up now the two Western Supplies dies which you sent, we see no question whatever as to both of them being in line with the Freeman structure and mode of operation rather than the old vamp die type.

We might refer you to claim 28, which covers, to our minds, the general aspects of the sliding die block, up-standing cutting edges, and work clamp, and claim 32 as to the combined clamp and position indicating means.

With relation to the claims of the patent on the mask per se, our analysis indicates the Western mask plate as being substantially hinged. As to "partially surrounding the work" as a feature of the specific claims, there is nothing in the old die submitted to us which combines the clamping function with work positioning edges, which

both of the Western dies do. Irrespective of this feature, the die with the particularly shaped cut-away portion seems to us a mask in the most detailed sense.

[fol. 228] We are writing this letter in the hope that it will not be necessary to file a supplementary bill in the case that we have pending, causing expense and trouble to all concerned, when it would appear that it is really not called for.

We trust that you will see fit to have Mr. Altvater report on and account for such dies, both as to the recent past during which he has failed to report them and in the future, and will let us have prompt assurance to that effect.

Yours very truly,

A & A.

MA*HS

CC to Mr. Freeman.

?

[fol. 229] (Plaintiffs' Exhibit 29-G.)

Cincinnati, Ohio
February 19, 1932

Western Supplies Co.
2920 Cass Avenue
St. Louis, Missouri
Attention: Mr. A. W. Altvater

3

Gentlemen:

We note reference in your letter of February 1 that you are not reporting dies similar to those sent to Allen & Allen.

The old die that you sent them is entirely different from the dies that you are now making which embody important features in die making which we developed.

It appears to us that all controversy can be avoided if you will make dies on the order of what you call the old die with sheath gauge, and not make, for territories in

which you are not licensed, the dies having masks as you are now doing, and report these dies when made for the St. Louis territory.

Very truly yours

THE LOUIS G. FREEMAN CO.

BENJ. W. FREEMAN

BWF:SDM

[fol. 230] (Plaintiffs' Exhibit 29-H.)

April 1, 1932.

Messrs. Rippey & Kingsland
Rialto Building
St. Louis, Mo.

Gentlemen:

Re: Freeman v. Western Supplies.

We have now considered the proposal made by your Mr. Kingsland and A. W. Altvater in conference at our office on March 12th, that the flat bed dies with mask of Western Supplies will be recognized as coming under the Freeman contract, provided the territorial restriction of the contract be extended as to these dies.

The conclusion that we have reached is that Mr. Freeman cannot accept this condition.

We recall that Mr. Altvater stated that he had an application for patent on this flat bed die which could issue at any time; but this does not alter our opinion that under the contract, these dies should be accounted for.

Accordingly, we trust that you will promptly advise us whether or not Mr. Altvater proposes to continue making and selling these dies without reporting them in the usual way.

Yours very truly,

ALLEN & ALLEN.

MA/JS

[fol. 231]

(Plaintiffs' Exhibit 29-I.)

Ripsey & Kingsland.
Rialto Bldg.,

St. Louis, Mo. April 5, 1932.

Messrs. Allen & Allen,
Gwynne Bldg.,
Cincinnati, Ohio.

Gentlemen:

Re: Freeman v. Western Supplies Co.

We acknowledge receipt of your letter in relation to the flat bed dies made by the Western Supplies Company.

We had hoped that you would see that it was to the advantage of both parties to accept the compromise suggestion that we made to you while in your office. Since you have reached the conclusion that you cannot do so, Mr. Altvater has decided to withdraw this type of die from the market inasmuch as it is not an essential item for him to supply to his customers.

He concluded to take this action simply to remove any possible grounds of controversy, and it should be understood that there is no implication to be drawn from the fact that the Western Supplies Company have withdrawn this type of die from the market. We are still of the opinion that this die is not covered by the Freeman patent.

We will appreciate it if you will return the dies sent to you at your convenience.

Very truly yours,

RIPSEY & KINGSLAND.

[fol. 232] (Plaintiffs' Exhibit 29-J.)

May 11, 1933.

Messrs. Rippey & Kingsland
Rialto Building
St. Louis, Mo.

Gentlemen:

Attention Mr. Kingsland.

If you will refer to your letter of April 5, 1932, you will note that a controversy between Freeman and the Western Supplies Company was concluded upon Mr. Altvater's agreement to cease making the type of die in question. Acting on this promise, Mr. Freeman insisted no further upon a report of such dies as had theretofore been made under his contract. Mr. Freeman advises that he has seen dies made by Western Supplies, and bearing the patent number of his patent which issued on this particular structure, in various shoe factories.

Will you please take this up with Mr. Altvater and advise us what Mr. Altvater proposes to do in the matter?

In behalf of Mr. Freeman, we must insist that Altvater account and pay royalty on all such dies sold by Western Supplies Company since April 5, 1932, the day of your letter, which concluded the former conference.

We had certainly hoped that when we had reached a conclusion in connection with any aspect of the situation between our respective clients, that this could be relied upon; but Mr. Altvater apparently does not keep you advised as to what he is doing.

Yours very truly,

MA/JS

[fol. 233] (Plaintiffs' Exhibit 29-K.)

St. Louis May 16, 1933.

Messrs. Allen & Allen
Attention: Mr. Marston Allen
Gwynne Building
Cincinnati, Ohio.

Gentlemen:

We have discussed with Mr. Altvater the subject matter of your letter of May 11th relating to the flat bed dies, and he advises us that he has had some calls for this type of die and, because of the advice that had been given him, he felt perfectly free to put them on the market.

Inasmuch as this matter was fully discussed, and as you know our views in the matter, there appears to be no further necessity in entering into a further discussion of the matter.

Mr. Altvater has concluded, under the advice that we originally gave to him, to supply the market with these dies when required by customers and, in view of our very definite opinion that these dies are not within the Freeman patent, he has concluded not to render any account of royalties, inasmuch as there appears to be no liability therefor.

As Mr. Altvater already had our opinion in this matter, he did not consider it necessary to advise us that he had returned to supplying the market with these dies. Otherwise we would have advised you sooner.

Very truly yours,

RIPPEY & KINGSLAND.

2-Q

[fol. 234] Mr. Allen: Offer in evidence as Plaintiffs' Exhibit No. 30 certified copy of file wrapper of reissue patent No. 20,203.

(The said document was marked by the reporter as Plaintiffs' Exhibit No. 30.)

[fol. 235] Plaintiffs' Exhibit No. 30 offered in evidence.

[fol. 212a] IN THE SUPREME COURT OF THE UNITED STATES,
OCTOBER TERM, 1942

No. —

A. W. ALTVATER and THE WESTERN SUPPLIES COMPANY,
Petitioners,

vs.

BENJAMIN W. FREEMAN and THE LOUIS G. FREEMAN
COMPANY, Respondents

• • • • •

STIPULATION—Filed January 30, 1943

It is stipulated by and between the parties hereto

1

That pages 213 to 379, inclusive, embody a file history of Freeman reissue patent 20,203; that the said file history is in all substantial respects identical with the printed copy of reissue patent 20,203 already appearing in the record at pages 161 to 186, inclusive; the said reissue patent having been issued as filed without any rejection or citation of any prior art on the part of the Patent Office.

[fol. 212b]

2

That said reissue patent 20,203 included a petition for allowance thereof signed at Cincinnati, Ohio, October 27, 1936.

3

That said plaintiffs' Exhibit 30 also contained a reissue oath appearing at pages 331 to 337 of the transcript which may be reproduced either by printing or such means as seems desirable to this Court.

4

That no parts of plaintiffs' Exhibit 30 other than said oath appearing at pages 331 to 337 need be reproduced.

5

That plaintiffs' Exhibit 31 appearing at pages 381-441 is the file history of reissue patent 20,202 and is in all

substantial respects identical with the printed copy of said reissue patent appearing at pages 151 to 159 of this record, the said reissue patent having been granted as filed by the Patent Office without rejection or citation of any art.

6

That the application for said reissue patent 20,202 was executed at Cincinnati, Ohio, October 27, 1936.

7

That the reissue oath of said plaintiffs' Exhibit 31 appears on pages 413 to 421 of the transcript, and may be [fols. 212c-330] reproduced by printing or otherwise as may seem fit to this Court.

8

That no parts of plaintiffs' Exhibit 31 need be reproduced herein other than the oath appearing on pages 413 to 421.

9

That this stipulation shall be inserted in the record before the Supreme Court, preferably after page 212.

Signed at St. Louis, Missouri, this 26th day of January, 1943.

Kingsland, Rogers & Ezell, Attorneys for Petitioners. Allen & Allen, Attorneys for Respondents.

PLAINTIFF'S EXHIBITS

Pages 213-329

[Omitted in printing]

Plaintiffs' Exhibit 30.

REISSUE OATH

STATE OF OHIO, :
COUNTY OF HAMILTON. : SS:

BENJAMIN W. FREEMAN, the above named petitioner, and the applicant in the matter of Letters Patent No. 1,681,033, granted August 14, 1928, being duly sworn, deposes and says that he does verily believe himself to be the original, first and sole inventor of the improvements set forth and claimed in the foregoing specification, and for which improvements he solicits a patent; that he does not know and does not believe that said improvements were ever known or used; that he is a citizen of the United States of America, and resides in Cincinnati, in the County of Hamilton, and State of Ohio; that he verily believes that the Letters Patent No. 1,681,033 referred to in the foregoing petition and specification, and herewith surrendered are inoperative, or defective, or insufficient for the reason that certain claims thereof do not adequately and satisfactorily define and cover said improvements; and that the insufficiency and defects consist particularly in claiming the invention too broadly, and in not limiting certain of the claims to the real invention made by him;

Deponent further says that the error which rendered such patent so inoperative arose from inadvertent accident or mistake and without any fraudulent intent.

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intent on the part of Deponent; that the following is a true specification of the errors:

The inadvertence, accident and mistake arose as follows: - the affiant understood that claims 6, 7, 8, 62 and 71 relating to the anvil die of his disclosure; and claims 62, 65 to 69 and 94 relating to said anvil die with certain guiding means, stated patentable invention independent of the method of use of the same, merely because applicant had discovered a new use for such mechanisms as were set forth in said claims and because they called for mechanism not the same as any prior mechanism, but that by a decision dated June 3, 1936, the Court of Appeals of the 1st Judicial Circuit in the cause of Premier Machine Co Inc. vs. Benjamin W. Freeman (the affiant), held the said claims 6, 7, 8, 62 and 71 invalid saying:

"It seems clear that Freeman's contribution to the art in a mechanical way as described in this group of claims was at best of doubtful patentability and cannot be found to involve invention with such clearness and certainty as is reasonably required in view of the extent and burden of the monopoly claimed."

And now in view of the said decision the affiant is forced to accept as correct the said decision of said Court of Appeals. Applicant further says that the Supreme Court of the United States did on October 19, 1936, refuse to review the said decision and denied certiorari to applicant. Accordingly applicant has instructed his attorneys to file a re-issue of his said patent dropping the said claims and inserting in their place, claims to his method of operation of the mechanism covered by said former claims, and alternatively certain claims

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to his said mechanism limited to use thereof in accordance with his said method, which is done herewith.

Affiant says further that his invention in connection with a mask in combination with a shoe cutting die was not necessarily related to his invention of a machine, or to his invention for cutting out shoe upper parts by means of an anvil die, and indeed presented a different field of invention therefrom and that instead of dividing out said mask claims, as he now knows was proper since the said decision of the Court of Appeals of the 1st Judicial Circuit, his attorneys inadvertently permitted the said claims to be made part of his patent herewith tendered for surrender, wherefore he instructed his attorneys upon re-issue to ask for a separate re-issue patent covering the said die and mask aspect of his invention

Affiant further says that his said original patent contained 94 claims which were directed to statement of his invention, and that upon re-issue he instructed his attorneys to limit the number of claims so as to avoid proximity of his re-issue patents, and so as to avoid the presence of claims in his re-issue patents not different substantially from his former patent claims held by the Court of Appeals of the 1st Judicial Circuit to be too broad, and so as to avoid confusing the line of division with affiant's die and mask claims.

Deponent says that he accordingly instructed his attorneys to apply for reissue in order to avoid any

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Plaintiffs' Exhibit 30.

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possibility of question of validity in his valid claims arising from failure to disclaim or otherwise take care of claims held to be too broad by the Court of Appeals of the 1st Judicial Circuit, that the question of breadth of these claims was not finally disposed of until October 19, 1936, and the reissue application was prepared and filed promptly thereafter, deponent having taken promptly the necessary steps for the making of the present application and having been diligent in respect of preparing and presenting the same; deponent further says that the subject matter of the claims herein was invented before he filed his original application for said invention, was not known or used before his invention thereof, was not patented nor described in a printed publication in any country more than twelve months before his original application; was not patented in a foreign country on any application filed by himself or his legal representatives or assigns more than twelve months before his original application; was not in public use, nor on sale in this country for more than two years prior to the date of his original application, and has not been abandoned.

Raymond W. Fennell

Subscribed and sworn to before me this 17
day of October, 1936.

Leo E. Oberlander
Notary Public, Hamilton
County, Ohio.
LEO E. OBERLANDER

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60

PLAINTIFF'S EXHIBITS

Pages 339-379

[Omitted in printing]

Mr. Allen: As Plaintiffs' Exhibit No. 31, reissue file wrapper of plaintiffs' patent No. 20,202.

(The said document was marked by the reporter as Plaintiffs' Exhibit No. 31.)

Plaintiffs' Exhibit No. 31 offered in evidence.

PLAINTIFF'S EXHIBITS

Pages 381-411

[Omitted in printing]

413
Plaintiffs' Exhibit 31.

A 309

Benjamin W. Freeman

STATE OF OHIO, :
COUNTY OF HAMILTON. : SS:

BENJAMIN W. FREEMAN, the above named petitioner, and the applicant in the matter of Letters Patent No. 1,681,033, granted August 14, 1928, being duly sworn, deposes and says that he does verily believe himself to be the original, first and sole inventor of the improvements set forth and claimed in the foregoing specification, and for which improvements he solicits a patent; that he does not know and does not believe that said improvements were ever before known or used; that he is a citizen of the United States of America, and resides in Cincinnati, in the County of Hamilton, and State of Ohio; that he verily believes that the Letters Patent No. 1,681,033 referred to in the foregoing petition and specification, and herewith surrendered are inoperative, or defective, or insufficient for the reason that certain claims thereof do not adequately and satisfactorily define and cover said improvements; and that the insufficiency and defects consist particularly in claiming the invention too broadly, and in not limiting certain of the claims to the real invention made by him;

Deponent further says that the error which rendered such patent so inoperative arose from inadvertence, accident or mistake and without any fraudulent or deceptive intent on the part of Deponent; that the following is a true specification of the errors:

The inadvertence, accident and mistake arose

-2-

as follows: - the affiant understood that claims 6, 7, 8, 62 and 71 relating to the anvil die of his disclosure; and claims 62, 65 to 69 and 94 relating to said anvil die with certain guiding means, stated patentable invention independent of the method of use of the same, merely because applicant had discovered a new use for such mechanisms as were set forth in said claims and because they called for mechanism not the same as any prior mechanism, but that by a decision dated June 3, 1936, the Court of Appeals of the 1st Judicial Circuit in the cause of Premier Machine Co. Inc. vs. Benjamin W. Freeman (the affiant), held the said claims 6, 7, 8, 62 and 71 invalid saying:

"It seems clear that Freeman's contribution to the art in a mechanical way as described in this group of claims was at best of doubtful patentability and cannot be found to involve invention with such clearness and certainty as is reasonably required in view of the extent and burden of the monopoly claimed."

And now in view of the said decision the affiant is forced to accept as correct the said decision of said Court of Appeals. Applicant further says that the Supreme Court of the United States did on October 19th, 1936, refuse to review the said decision and denied certiorari to applicant. Accordingly applicant has instructed his attorneys to file this re-issue of his said patent dropping the said claims and inserting in their place, claims to his method of operation of the mechanism covered by said former claims, and alternatively certain claims to his said mechanism limited to use thereof in accordance with his said method, which is done herewith.

Plaintiffs' Exhibit 31.

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Affiant says further that his invention in connection with a mask in combination with a shoe cutting die was not necessarily related to his invention of a machine, or to his invention for cutting out shoe upper parts by means of an anvil die, and indeed presented a different field of invention therefrom and that instead of dividing out said mask claims, as he now knows was proper since the said decision of the Court of Appeals of the 1st Judicial Circuit, his attorneys inadvertently permitted the said claims to be made part of his patent herewith tendered for surrender, wherefore he instructed his attorneys upon re-issue to ask for this separate re-issue patent covering the said die and mask aspect of his invention, and affiant further says that in said decision of the Court of Appeals of the 1st Judicial Circuit, the following statement was made:

"It will be necessary to consider separately the claims in this group. Those covering a clamp plate or mask having a fixed relation to the die and having a window the outline of which is similar to the pattern to be perforated, and which is so placed with relation to the pattern and to the die as to be used as a gauge, are we think valid. The mere use of a window in the clamp or of a straight curved edge in or connected with the clamp for gauging purposes did not involve invention in view of the prior art.

Applying these principles claims 10 to 17, inclusive, are not good; claim 18 is good; claim 70 specifies a clamp plate 'provided with an opening through which the work may be observed and accurately positioned with respect to the cutting edges of the die.'

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Construing this as referring to an opening so conforming to the size, shape and position of the ornamentation and so located with respect to them that it serves as a gauge this claim is valid; claim 79 contains nothing patentable over the prior art and is invalid; claim 51 specifies a clamp plate with 'an opening to surround the cutting edges of the die, one edge of which is' arranged to 'act as a gauge'. Construing this to mean that the shape of the opening conforms to the pattern of the ornamentations and that one edge of it is so shaped and located with respect to them as to serve as a gauge, it is valid."

Affiant says that he did not understand that his claim 10 to 17 and 79 were subject to construction as if dis-associated from a die, and covering the mere use of a window in connection with a clamp. Accordingly applicant, in view of said decision, upon being advised, instructed his attorneys to drop, upon re-issue the said claims 10 to 17 and 79, and instead to present in their place certain claims which included the ornamenting means or die as a part of the combination with his said mask and to present as claims for re-issue in said divisional case, claims which were free of the defect of not including the part which cut into the shoe material along with the mask; which affiant's attorneys have done herewith.

Deponent says that he accordingly instructed his attorneys to apply for this divisional reissue in order to avoid any possibility of question of validity in his valid claims arising from failure to disclaim or otherwise take care of claims held to be too broad by the Court of Appeals

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of the 1st Judicial Circuit, that the question of breadth of these claims was not finally disposed of until October 19, 1936, and this divisional reissue application was prepared and filed promptly thereafter, deponent having taken promptly the necessary steps for the making of the present application and having been diligent in respect of preparing and presenting the same; deponent further says that the subject matter of the claims herein was invented before he filed his original application for said invention, was not known or used before his invention thereof, was not patented nor described in a printed publication in any country more than twelve months before his original application; was not patented in a foreign country on any application filed by himself or his legal representatives or assigns more than twelve months before his original application; was not in public use, nor on sale in this country for more than two years prior to the date of his original application, and has not been abandoned.

Benjamin W. Freeman

Subscribed and sworn to before me this 27

day of October, 1936.

Leo E. Oberschmidt
Notary Public, Hamilton
County, Ohio

LEO E. OBERSCHMIDT

PLAINTIFF'S EXHIBITS

Pages 423-441

[Omitted in printing]

Mr. Allen: And as Plaintiffs' Exhibit No. 32, a certified copy of the proceedings in connection with the disclaimer in patent No. 1,681,033.

(The said document was marked by the reporter as Plaintiffs' Exhibit No. 32.)

Plaintiffs' Exhibit No. 32 offered in evidence.

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Plaintiffs' Exhibit 32.

DEPARTMENT OF COMMERCE
UNITED STATES PATENT OFFICE

To all persons to whom these presents shall come, Greeting:

THIS IS TO CERTIFY that the annexed is a true copy from the records
of this office of the Disclaimer, filed November 11, 1936,
in the matter of the

Letters Patent of

Benjamin W. Freeman,

Number 1,681,033

Granted August 14, 1928,

for

Improvements in Cut-Out Machines for Shoe Uppers.

U. S. Pat. Ct. Ex. Div. for Dist. of W.
No. 1116-24 Equity

Freeman
Admitted
Ct. No. 212



IN TESTIMONY WHEREOF I have hereunto set my
hand and caused the seal of the Patent Office to be
affixed, at the City of Washington, this second
day of February, in the year of our Lord
one thousand nine hundred and forty and of the
Independence of the United States of America the
one hundred and sixty-fourth.

ATTEST:

[Signature]
Chief of Division

[Signature]
Commissioner of Patents

RECORDED
U.S. PATENT OFFICE
NOV 11 1936

NOV 11 1936

MAILED 11/11/36

TO THE COMMISSIONER OF PATENTS:

LIBER 3 PAGE 483

Your petitioner, Benjamin W. Freeman, a citizen of the United States, residing at 2615 Handasyde Court, in the City of Cincinnati, in the County of Hamilton, and State of Ohio, represents that in the matter of a certain improvement in CUT OUT MACHINE FOR SHOE UPPERS, for which letters patent of the United States, No. 1,681,035, were granted to him on the 14th day of August, 1928, and that he has reason to believe that through inadvertence and without any fraudulent or deceptive intention, the specification and claims of said letters patent are too broad, including that which was not an invention, and hence including that of which he was not the original inventor. Your petitioner therefore hereby enters this disclaimer to the following claims of said letters patent, to-wit:

Claims 6, 7, 8, 10 to 17 inclusive, 62, 65 to 69 inclusive, 71 to 74 inclusive, 79 and 84.

And your petitioner further represents that he has filed a reissue application for reissue of the said letters patent, in which he has omitted the claims above disclaimed, and in their place substituted ones which he believes to properly express his invention, and that this disclaimer is filed out of abundant caution in order to preserve unto him the rights to protection for that of which he is the original and first inventor.

Signed at Cincinnati, in the County of Hamilton, and State of Ohio, this 4th day of November, 1928.

Benjamin W. Freeman

WITNESSES

L. B. Gurnea

Henry J. Freeman

Mr. Allen: All right. I can proceed now with my witnesses.

A. W. ALTVATER,

a witness of lawful age, being duly produced, sworn and examined, testified on behalf of the plaintiffs as follows:

Direct Examination.

By Mr. Allen:

Q. 1. Mr. Altvater, you are A. W. Altvater, are you not?

A. I am.

Q. 2. And president of The Western Supplies Company?

A. Yes, sir.

[fol. 236] Q. 3. And you also manage the business of that company, do you not, Mr. Altvater? A. Yes, sir.

Q. 4. And you are a substantial owner in connection with that business, also, are you not, Mr. Altvater? A. Yes, sir.

Q. 5. Mr. Altvater, I hand you herewith a card entitled "Job D 12867", and attached to it, pinned together, two sheets of paper, one entitled "Order Blank", and the other with writing on it in green and black and some sketches. Please state whether that card and those sketches and items appearing on the sheets of paper relate to the die, Plaintiffs' Exhibit No. 1. A. I think they do.

Q. 6. Will you look at the sketch on the second sheet on the letter, second sheet of notes attached to the card, and note what it says thereon?

(The witness examines the said document.)

Q. 7. It says: "Fitted shoe as per sample can be slid underneath gauge and fit edge of gauge to line of stitch marks." Am I correct?

A. That is what it says. It says that the die shall be [fol. 237] arranged so that it will gauge to a previous marked stitch line.

Q. 8. I see. I hand you a piece of work, Mr. Altvater, with a mark on it, a stitch line mark on it, such as shown in the sketch forming part of this second sheet, and will you kindly gauge that piece of work in the die?

(The witness demonstrates.)

A. It is now gauged to the stitch line on the gauge.

Q. 9. I see. Mr. Altvater, am I right, the stitch line that you have used to gauge by extends from on the left-hand side of the die, from the tip of the central prong around the oval shaped curve, and thence following the curved line over to near the terminus of the curved line that is a continuation of that small oval? A. It is.

Q. 10. And that is true on the left-hand side? A. Yes, sir.

Mr. Allen: Or right-hand side. I ask that the Court—I don't need to put the card in, because the die is admitted.

Mr. Kingsland: Go ahead and put it in. It says against the stitch mark and not against the stitch line.

Mr. Allen: All right. I offer in evidence the card and the two sheets of paper attached with notes thereon [fol. 238] as Plaintiffs' Exhibits Nos. 33-A, 33-B, and 33-C.

(The said documents were marked by the reporter as Plaintiffs' Exhibits Nos. 33-A, 33-B, and 33-C, respectively.)

Plaintiffs' Exhibits Nos. 33-A, 33-B, and 33-C, Offered in Evidence. (Physical Exhibits.)

(Plaintiffs' Exhibits 33-A, 33-B and 33-C are omitted from the printed record at this place pursuant to Order of U. S. Circuit Court of Appeals of March 10, 1942.)

Q. 11. I will show you a photograph, Mr. Altvater, [showing] a piece of work in defendants' die (Plaintiffs' Exhibit No. 1), and without regard to little details, does that show the piece of work gauged as you have gauged this sample? A. Well, it shows some similarity.

Q. 12. You have got it more accurately than in that photograph, have you, Mr. Altvater?

A. I would not say that. The photograph shows a shoe that has been stitched.

Q. 13. All right. Here is a sample of the shoe that has been stitched. Would you put it in there now and see if the photograph shows as the sample would be?

A. Well, this shoe that has been stitched, there is a possible chance of the operator cutting the stitches.

Q. 14. No, no. Will you just put—gauge it in the die as you did before, and then look at the photograph and see

whether the photograph shows generally what you have now done?

[fol. 239] A. The photograph shows what I have now done.

Q. 15. All right. But in the operation of this die, Mr. Altvater, the work shown in this photograph is not stitched, but has the marks on it in white which are later to be stitched, is that correct? A. Not in the photograph.

Q. 16. No, the photograph is wrong in that respect.

A. The photograph will show that the shoe had already been stitched.

Q. 17. Yes.

A. But the shoe and the die itself shows what the die does to the shoe, or what operation is performed on the die.

Q. 18. All right. Now, the shoe that I first showed you, the shoe upper with ink marks—I better have that marked as plaintiffs' exhibit. (Marked as Exhibit No. 34.)

The Court: We will take a recess at this point until 2:00 o'clock.

At this point, a recess was had until 2:00 o'clock P. M.

After recess, at 2:00 o'clock P. M., on Tuesday, February 6, 1940, the following proceedings were had:

The Court: You may proceed.

[fol. 240] Direct Examination Resumed.

By Mr. Allen:

Q. 19. Mr. Altvater, you had placed Exhibit No. 34, a shoe, in the die, Exhibit No. 1, and gauged it, and so that the record will show what you have done, could you take this photograph and take the pen that I have here and outline the portions on the top or gauging plate there that you gauge with the lines, the ink lines on the work?

A. I was looking at the die.

Q. 20. Oh, excuse me.

A. I am now marking the drawing, showing what portion of this gauge lined up with the stitch line or the ink mark line shown on the shoe.

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Mr. Allen: Now, then, I would like to introduce the photograph that Mr. Altvater has just marked, as Plaintiffs' Exhibit No. 35.

(The said document was marked by the reporter as Plaintiffs' Exhibit No. 35.)

Plaintiffs' Exhibit No. 35 offered in evidence.



[fol. 241] Q. 21. Now, Mr. Altvater, we were talking about another piece of work like Exhibit No. 34, only further treated. Now, would you look at this piece of work, this upper, and state what has been done to that upper, following the stage where it was placed in the die for cutting out? A. It was cut out and stitched.

[fol. 242] Q. 22. And stitched. And the stitching that has been placed around the cut out portion is in accordance with the ink marks on the Exhibit No. 34, is that right?

A. It was stitched where it was marked.

Mr. Allen: Yes. I would like to have this completed upper marked as Plaintiffs' Exhibit No. 36.

(The said upper was marked by the reporter as Plaintiffs' Exhibit No. 36.)

Plaintiffs' Exhibit No. 36 offered in evidence. (Physical Ex.)

Q. 23. I now call your attention, Mr. Altvater, to Plaintiffs' Exhibit No. 2. Now, that is what is called an elevated gauge die by you, is that right? A. It was when it was new.

Q. 24. Yes. What has happened to it now? It has become— A. (Interrupting) Broken.

Q. 25. In what respect? A. Mashed down.

Q. 26. I see. In other words, when this die was new, there were more ribs or screws or something that have now gone from it, which held the top plate that has the decalcomania of your company and marks on it at a position raised above the stripper plate of the die? A. Right.

Q. 27. And as it is now, the plate has slumped a little bit, so it is actually touching? A. That is it.

[fol. 243] Q. 28. So that is not correct, is it?

A. That is incorrect.

Q. 29. Now, you produced a card marked "Job No. 22208", with reference to this die, as I understand it.

A. Yes.

Q. 30. That is correct, isn't it, this card refers to this die? A. It does.

Q. 31. Now, you did not have any sheets such as—you did not produce any sheets such as the sheets, Exhibits Nos. 33-B and 33-C attached to card 33-A? A. That is right.

Q. 32. But did you have any such things? A. No.

Q. 33. In your records. Is that card all that you had in your records with regard to this?

A. Probably the pattern that the die was made from.

Q. 34. The pattern that the die was made from, did you bring that down with you today?

A. I could not find the original.

Q. 35. Oh, you could not find the original pattern?

A. No.

Q. 36. I notice a drawing on the back of this card. What is that supposed to represent?

A. The [perforations] represent drawings that were made off of the pattern. The red line represents a drawing [fol. 244] that I made when these papers were brought at the shop.

Q. 37. A drawing that you made when you got the order for this die, you mean?

A. No, no. A drawing I made just the other day when we were looking for the exhibits. I marked your exhibit on here also, so they would correspond. Had nothing to do with the construction of the die.

Q. 38. The ink marks?

A. The ink marks did, but the red line did not.

Q. 39. I see. Well now, then you have no record showing the basis for your design of the top plate here of this die, Exhibit No. 2? A. Can't find anything.

Q. 40. I will show you a piece of shoe upper and ask you to gauge that piece of shoe upper in this die the way it would be gauged?

A. I don't know whether this shoe upper ever was made by this die.

Q. 41. Well, put it in the die and gauge it, and see if you do not then agree with me that that is the shoe upper for that die.

A. It hardly corresponds. There is no center location.

Q. 42. Mr. Altwater, I call your attention to a little stabbing up in the front of that toe. It has become bent with age, sitting around in the files, of course.

[fol. 245] A. That stabbing that I see there is about a quarter of an inch off center.

Q. 43. Well, at least put this upper in that die.

(The witness complies with the said request.)

Q. 44. Have you now gauged this piece of upper in the die? A. Not very accurately.

Q. 45. Well, can you gauge it more accurately?

A. I don't think so.

Q. 46. This work has become crumpled, has it not?

A. Well, I don't know whether it has become crumpled. I think it was crumpled originally.

Q. 47. What are the gauging edges in this plate on top of the die, Exhibit No. 2, can you point them out?

A. Tip line and probably these lines here (indicating).

Q. 48. Referring to the curved outlines of the two prongs?

A. That is it.

Q. 49. At the bottom of the small enclosure there?

A. That is right.

Q. 50. Now, I will show you a piece of work which has been cut, and will you compare this piece of work with that die and see if that piece of work has been cut on that die or on a die like it?

A. It corresponds to the perforation holes, yes.

Q. 51. Would you say that this work, first, the uncut [fol. 246] shoe and then the cut shoe, would be work of the type for which this die was built? A. I could not say that.

Q. 52. I do not mean that this is the exact work. That is, that you may not know, but I will say, is this die made for work which is done like the work I show you now? A. I could not say that.

Q. 53. Now, do you say that you have a pattern in connection with this card B 22208?

A. No original pattern. Only a pattern that I made myself.

Q. 54. When did you make it yourself?

A. The other day, when you asked for this equipment.

Q. 55. Now, what does that pattern show?

A. It shows a pattern with perforations and the marked lines.

Q. 56. Where is that that you made, have you got it with you? A. I believe.

Q. 57. Now, this piece of cardboard that you made the other day was what you call a pattern? A. That is it.

Q. 58. And what are the lines on the pattern supposed to indicate?

A. Stitch marking line, lines where they probably use for—well, I wouldn't just say stitch—any other marker lines which I see there, they would be marked by ink first.

[fol. 247] Q. 59. You have no personal recollection of

whether the particular shoe made on this die had an overlay as in this sample, or had ink marks where the overlay was going to be placed?

A. Probably that customer sent us the pattern of this order, cut out on that pattern like this, with perforations showing the lines that they would mark first to gauge by.

Mr. Rogers: Just a minute.

Q. 60. Now, the witness has now referred to two pieces of material. The first piece of material is the white paper with punchings in the piece of paper, and that is what he calls a paper pattern. Is that right? A. That is it.

Q. 61. That is to say, it shows lines which are to be part of the design of the shoe, is that right, and holes there, where those holes are going to come with reference to that part of the design of a shoe?

A. I would not just say part of the design of a shoe. It might be used for some other purpose.

Q. 62. Well, you said these might be stitch lines.

A. They might be stitched later on, yes.

Q. 63. Yes. A. However, they are marked first.

Q. 64. They are marked first, and then they are stitched later on? A. That is it.

Q. 65. According to your statement. And the holes [fol. 248] which you have in this piece of cardboard are formed with relation to different ink lines which you say are stitch lines or marked lines, is that correct?

A. That is right.

Q. 66. That is what this pattern is? A. Yes.

Mr. Allen: I should like to have that marked as Plaintiffs' Exhibit No. 37.

(The said pattern was marked by the reporter as Plaintiffs' Exhibit No. 37.)

(Plaintiffs' Exhibit 37 is omitted from the printed record at this place pursuant to an Order of the U. S. Circuit Court of Appeals of March 10, 1942.)

Mr. Allen: I would like to have the card which the witness referred to marked as Plaintiffs' Exhibit No. 38.

(The said card was marked by the reporter as Plaintiffs' Exhibit No. 38.)

(Plaintiffs' Exhibit 38 is omitted from the printed record at this place pursuant to an Order of the U. S. Circuit Court of Appeals of March 10, 1942.)

Q. 67. Now, you refer to a piece of material made up out of fiber, which I have here in my hand. Now, as I understand you, that would be your concept of the kind of thing that the customer sent to you at the time you made this die? A. That is right.

Q. 68. And it has certain portions cut out in it? A. Yes.

Q. 69. Now, those cut-outs are made there for what purpose?

A. That is still part of the line where they use when they [fol. 249] mark them. If they are marked by hand, why they have a pen or a pencil that they use on those just for drawing around the line for sort of a tracing pattern, is what it is.

Q. 70. I see. Now, you offered that as tending to show what you think you might have received in connection with your order for the die, Exhibit No. 2?

A. Well, I offered this to show how it is usually handled, that a pattern like this is just used to mark on material with, go over these marked lines that are marked on there with ink, either by hand or machine, are used for gauging purpose.

Q. 71. Now, in other words, your customers would not send you anything like this piece of cardboard or piece of fiber? A. He might.

Q. 72. Well, is that ordinarily done?

A. We get three or four hundred different kinds every day by three or four hundred different kinds of people.

Q. 73. I see. But your testimony with regard to this piece of fiber material is that this may have been what the customer did in preparing a piece of shoe upper material for cutting it out on the die?

A. Well, the customer usually gets a pattern like this back from the pattern company, and then the man that lays out the design also uses this pattern to make his [fol. 250] paper pattern that he punches the perforations in when he sends them to us. He usually puts those markers on the pattern with the perforations off of his original fiber pattern.

Q. 74. All right. Now then, Exhibit No. 37 is the thing,

however, which you use in connection with making up dies at your shop? A. Yes, sir.

Q. 75. Or something like that? A. Something similar.

Q. 76. All right. Now then, what are those letters written in lead pencil over the word "clamp" which is scratched out on that card? A. Suspended, [abbreviated].

Q. 77. Suspended, that is a clamp gauge.

A. No. That is an elevated gauge. That is a gauge sets up in the air, has no clamping means.

Q. 78. Like Exhibit No. 2? A. Like Exhibit No. 2.

Q. 79. Now, that went to the Advance Shoe Company, didn't it? A. That is what it says there.

Q. 80. And you are not in a position to state whether the piece of work that I show you was the work used on this die or not, is that correct?

A. Well, it does not look logically to be the right piece of work, because this upper has been spoiled in cutting.

Q. 81. Well, no doubt.

[fol. 251] A. Evidently they use it for just plain flat perforation for an underlay.

Q. 82. Well, Mr. Altvater, you realize, do you not, that to get samples of pieces of work, they do not give you their best samples in a shoe factory. I am just asking you if your testimony is that this work that I hand you, one a piece which is uncut and the other a piece which is cut, is not the type of work for which this die was designed?

A. I would like to have that question asked again.

Mr. Allen: All right.

(The question was repeated by the reporter.)

A. I cannot say it was designed for that type of work.

Q. 83. It could have been, though, could it?

A. It could have been designed for most anything.

Q. 84. It could have been designed for that kind of work.

Mr. Kingsland: If the Court please, I think that is objectionable. The witness has definitely stated he cannot identify that, and I think it is just argument with the witness.

Mr. Allen: Well—

The Court: Sustain the objection.

Q. 85. Let me see if I can put the question in another way.

The Court: An ordinary piece of leather could have been designed for this and that, and that is something [fol. 252] we take notice of. It does not take an expert to testify on that.

Mr. Allen: No, but what I want to develop from the witness is the fact that this particular die, Exhibit No. 2, is one which operates in connection with the piece of work that I have shown him, and gauges to that piece of work along the lines he has indicated.

Q. 86. Are you willing to admit that?

A. Oh, I could say that probably somebody made up—

Q. 87. (Interrupting) Just answer that question.

A. Somebody made a shoe to conform with that die as near as they could, but as I stated before, they did not do a very good job, because they ruined the upper when they was cutting it. If I would send something like that out to the customer, it would be returned to us, because it would not work; but we can take this flat piece and put it in there and line it up, too.

Q. 88. Let's see you do that.

A. I cannot do that, because this was not made to that. This was made by sight from the photograph.

Q. 89. Now, let's go back to my question that I asked—and I think that was a proper one—a minute ago. Please read it, Mr. Reporter.

(The question was repeated by the reporter as follows: [fol. 253] "No, but what I want to develop from the witness is the fact that this particular die, Exhibit No. 2, is one which operates in connection with the piece of work that I have shown him, and gauges to that piece of work along the lines he has indicated. Are you willing to admit that?")

Mr. Kingsland: If the Court please, I think that is still objectionable.

A. I don't know.

The Court: The witness has answered.

Mr. Allen: All right. I will ask to have these two pieces

marked for identification. Mark them offered in evidence as Plaintiffs' Exhibits Nos. 39 and 40, 39 being the uncut upper and 40 being the cut upper.

(The said uncut upper and the [cup] upper were marked by the reporter as Plaintiffs' Exhibits Nos. 39 and 40, respectively.)

**Plaintiffs' Exhibits Nos. 39 and 40 Offered in Evidence.
(Physical Ex.)**

Q. 90. Mr. Altvater, I am placing Exhibit No. 37 in Exhibit No. 2. It appears clear that the drawing which you have made on Exhibit No. 37 does not match up with that die, does it not? A. That is right.

Q. 91. Would you be willing to make us a drawing that did? Here is the die. A. I am not a pattern maker.

Q. 92. Who made this drawing?
[fol. 254] A. I had this made—done by a pattern company, stamped on there.

Q. 93. Could you take with a pen and mark the gauging edges on this photograph of your top plate in the die, Exhibit No. 2?

(The witness marks on the photograph as requested.)

Mr. Allen: The photograph on which Mr. Altvater has drawn the gauging edges I offer in evidence as Plaintiffs' Exhibit No. 41.

(The said photograph was marked by the reporter as Plaintiffs' Exhibit No. 41.)

Plaintiffs' Exhibit No. 41 Offered in Evidence.

[fol. 255] Q. 94. And those edges that you have marked would correspond with some marking on the work itself, is that correct?

A. They would be held up above some ink marking lines.

Q. 95. Yes, so as to locate the work beneath?

A. That is right.

Q. 96. Now, whether it was ink marking lines or lines of applique work, your present recollection cannot assist us, can it? A. No, sir.

Q. 97. Now, you have brought a card here in connection with the drawing, Exhibit No. 3-A, which is a clamp gauge type of die, is that right? A. Yes, sir.

Q. 98. The only other item besides the card that you [fol. 256] brought is the order from the Brown Shoe Company? A. Yes, sir.

Q. 99. Have you anything else in the file in regard to that die? A. Nothing.

Q. 100. Which would indicate the whys and wherefores of the particular cut edges and top plate, and so forth?

A. Nothing.

Q. 101. No cut plate or anything else? A. Nothing at all.

Q. 102. I notice a drawing and some rough sketching in ink—a drawing in ink and some rough sketching in pencil on the back of a card. What does that indicate?

A. They were also put on by myself.

Q. 103. All except the ink drawing and piece of work?

A. That is right.

Q. 104. That was on there? A. That was on there.

Q. 105. And the ink markings of the cut out portions?

A. Were on there.

Q. 106. Were on there. Now, you have no recollection of this die, have you?

A. No recollection, positive recollection, no.

Q. 107. Can you point out on the drawing of Exhibit 3-A the gauging lines on this top plate and clamp?

A. If I have no recollection, I sure cannot do justice by [fol. 257] myself by doing it.

Q. 108. You have brought in a card with reference to [Plaintiffs's] Exhibit No. 5. Is this the only thing in your file in connection with that die?

A. The only thing we could find.

Q. 109. Have you any recollection of that piece of work and that die? A. I have a rough idea what it was for.

Q. 110. I see. Well, what was it for?

A. Quartering a man's shoe.

Q. 111. And can you show where the gauging was done on that? A. Not positively.

Q. 112. This card says "add clamp and make new gauge", doesn't it? A. That is what it says.

Q. 113. Well, I wish you would mark on here what you conceive to be the gauging edges.

A. I cannot truthfully do it. I could only mark from here to here (indicating), truthfully.

Q. 114. What do you mean by truthfully?

A. That is the only thing I can see that might line up with anything, any part of the shoe.

Q. 115. What about the outwardly curved line from the peak of the cut-out ending in a small straight slanting portion? A. I don't know what that would fit up against.

Q. 116. Was that made for purposes of fitting up against [fol. 258] something? A. I don't know.

Q. 117. Are you accustomed, in making your dies, to put curved lines with angles and straight lines and sharp angles, and so forth, just to make them look pretty, or to match up with something?

A. Well, we certainly make them look pretty.

Q. 118. Is it true that the shape of the two openings at the side here in connection with that elevated gauge plate of Plaintiffs' Exhibit No. 5 are gauging openings?

A. I wouldn't say. If you look at this line out here (indicating), that has a very nice, neat line on it also, and I am sure that gauges to nothing such as this odd shape here. I am positive there is nothing there.

Q. 119. Can you answer my question?

A. You will have to ask it again.

Mr. Allen: All right.

(The question was repeated by the reporter.)

Mr. Allen: I mean to say the boundary lines around these two openings are shaped so as to act as gauges.

A. Our job is to add a gauge, and evidently it is a gauge.

Mr. Allen: Well, would you read the question again? Perhaps my question is not very lucid, Mr. Altvater. I

will ask it again. I am referring to the portions of the gauge plate in Plaintiffs' Exhibit No. 5 which in the draw-[fol. 259] ing are shown as bounding a perforated area. Now, what I am asking you is if it is not true that the particular shape given to the lines surrounding those portions of your gauge plate were given to them so that the plate would act as a gauge? A. That, I cannot answer.

Q. 120. Now, let us take Plaintiffs' Exhibit No. 4. You have produced in connection with that a card and an order from the Brown Shoe Company. Are those the only papers that you had in connection with that die? A. It is.

Q. 121. All that you could find?

A. That is all I could find.

Q. 122. Now, there is an ink sketch on the back of that card, too, isn't there? A. Yes, sir.

Q. 123. Well, those sketches show two quarters, isn't that correct?

A. I would not say quarters. They are two parts of a shoe, evidently of samples on a quarter.

Q. 124. Now, let us take the gauging plate here. It has an opening shaped like an urn, sort of, with straight lines at the top, and then a surrounding line, as I look at it. Please state whether the shape of the lines that you see here are gauging lines to be gauged in some part of the [fol. 260] work, to be used on that die.

A. I do not know for sure.

Q. 125. Is that what it was intended to be, a gauge, that plate?

A. I do not know for sure. It was intended to be a clamp of some kind.

Q. 126. Well, the card says gauge.

A. And it also says clamp.

Q. 127. All right. Now then, the device that is a clamp is also a gauge, is it not, then? A. It might have been.

Q. 128. It might? A. It might have been.

Q. 129. Well, is it or isn't it?

A. I don't know. I don't see any marking on the top card, it don't correspond with the line on here, that it would gauge to anything particularly there.

Mr. Allen: I will ask for the card in question to be marked as Plaintiffs' Exhibit No. 42.

(The said card was marked by the reporter as Plaintiffs' Exhibit No. 42.) (Physical Ex.)

(Plaintiffs' Exhibit 42 is omitted from the printed record at this place pursuant to an Order of the United States Circuit Court of Appeals of March 10, 1942.)

Q. 130. Mr. Altvater, you have known, with regard to all of these dies, since sometime in the year 1936, when you answered the interrogatories in this case, that the dies were [fol. 261] charged by the plaintiffs to infringe or to be under their contract, isn't that correct?

Mr. Rogers: If the Court please, I think that question is objectionable because of the fact that the exhibits were not made until in response to our request for interrogatories which were answered here about last month sometime. Granting that those exhibits were in: there is nothing in the case to make it known that they were the ones in suit.

Q. 131. Mr. Altvater, I call attention to your affidavit signed by you on the 14th day of April, 1936, which is Plaintiffs' Exhibit No. 7. That is your signature?

A. Yes, sir.

Q. 132. And you swore to that, did you not? A. Yes, sir.

Q. 133. There you said with regard to the die, Plaintiffs' Exhibit No. 4:

"Yes, this die was manufactured by Western Supplies Company for Sullivan, Illinois."?

A. That is right.

Q. 134. But you never investigated to find out what the object of that plate was, or anything like that, in that die?

A. I had no reason to.

Q. 135. Now, just one final question. You say—is it your testimony that the plate which is outlined here and serves [fol. 262] as a clamping is not also a gauge in this case?

A. No, I don't say that it is not also a gauge. I [says] I don't know which part of it was used for a gauge.

Q. 136. I did not ask you that. Was it used as a gauge?

A. Probably part of it was used as a gauge?

Q. 137. All right. Part of the outline of the hole in that plate? A. Yes. That is a double plate.

Q. 138. I see. A. That represents two parts.

Q. 139. That is correct.

A. Joined together in the center, and probably some part here around—

Q. 140. (Interrupting) Some part of the outline in the opening of the plate? A. That is right.

Q. 141. And in that instance, it matched up with something on the work that matched with those lines, isn't that correct?

A. In that instance, it probably matched up with some ink marking line.

Mr. Allen: That is all.

Mr. Kingsland: That is all.

[fol. 263]

MARY GIBBONS,

a witness of lawful age, being duly produced, sworn and examined, testified on behalf of the plaintiffs as follows:

Direct Examination.

By Mr. Allen:

Q. 1. Please state your full name and address.

A. Mary Gibbons, Cincinnati, Ohio.

Q. 2. And what is your occupation, Miss Gibbons?

A. I am secretary to Mr. B. W. Freeman of the Louis G. Freeman Company.

Q. 3. Those are the two plaintiffs in this case? A. Yes.

Q. 4. Now, where is Mr. B. W. Freeman at this time?

A. He is at the Mayo Clinic.

Q. 5. At Rochester, Minnesota? A. Yes, sir.

Q. 6. I will show you a copy of a letter with a return receipt attached, and ask you if you can tell me what that is.

A. This is a letter to the Western Supplies Company, in December, 1936, regarding the reissue patents.

Q. 7. And what is the card that is on it?

A. Well, it is a card that is ordinarily returned to us, that the registered letter was received on the 10th [fol. 264] of December.

Q. 8. Who attached the card, this return card, to the letter?

A. I did, when the card was delivered to us by the postman.

Q. 9. And it has been in the file ever since?

A. Yes, sir.

Mr. Allen: I ask that the letter be received in evidence, to be marked Plaintiffs' Exhibit No. 43, and the card 43-A.

(The said documents were so marked by the reporter.)

[fol. 265] (Plaintiffs' Exhibit 43.)

December 9, 1936.

Western Supplies Company
2920 Cass Avenue
St. Louis, Missouri

Gentlemen:

We herewith enclose copy of Reissue Letters Patent No. RE. 20,202 and No. RE. 20,203. These, as you will note, are divisions of patent No. 1,681,033, which forms the basis of your license agreement.

RE. 20,202 relates to dies with masks only, and RE. 20,203 states the invention of the anvil die as a part of a method of shoemaking, which was indicated as the nature of this invention in a recent Court decision. A sale of an anvil die without a mask by you will carry with it the right to use it according to this method.

As we view the matter, the patent situation under which you are licensed is improved by this change and applies to the same dies, and this letter is to advise you that your license will apply in the future to these Reissue patents, instead of the one recited in the license.

Yours truly,

THE LOUIS G. FREEMAN COMPANY
BENJ. W. FREEMAN

BWF:MMG

(Part of Plaintiffs' Exhibit 43.)

Post Office Department
Official Business
Penalty for Private Use, \$300
REGISTERED MAIL
No. 45573
INSURED FIFTEEN
No. _____

ST. LOUIS, MO.
DEC 10
7-PM
1936

MAIL
EARLY
FOR
CHRISTMAS

Return to Louis A. Freeman Co.
919 1/2 Franklin St.
WASHINGTON,
Cincinnati, Ohio D.C.

RETURN RECEIPT

14704 434

Received of Post Office Department or Internal Audit, Registered Mail, No. _____

Louis A. Freeman Co.

Cincinnati, Ohio

12-10-36

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[fol. 267] Mr. Kingsland: Now, if the Court please, that letter is objectionable because it simply constitutes a statement, self-serving statement from the Louis G. Freeman Company to the Western Supplies Company. It was unanswered and, therefore, being only a self-serving declaration, it is not admissible. Furthermore, the contention is made here by the plaintiff that this *ex parte* method of making a new contract is valid. I say that, submitted for that purpose, it is not material, but it is incompetent because it is a self-serving declaration and unanswered letter. The letter simply says, "We herewith enclose copies of reissue patents", giving the numbers. These, as you will note, are divisions of the patent which was in suit originally. And then it says:

"Reissue 20202 relates to dies with masks only, and Reissue 20203 states the invention of the anvil die as a part of a method of shoemaking, which was indicated as the nature of this invention in a recent court decision. A sale of an anvil die without a mask by you will carry with it the right to use it according to this method.

As we view the matter, the patent situation under which you are licensed is improved by this change and applies to the same dies, and this letter is to advise you that your license will apply in the future to these Reissue patents, instead of the one recited in the license."

Now, Your Honor will recall that the evidence shows that at the time this letter was written, December 9, 1936, the Western Supplies Company was under an injunction in the first suit. There was no reply made to this letter, and as I said, it is incompetent as being a self-serving declaration, and is immaterial to show a change in the contract. I might add that all dies that were made for the machines that were required to be marked under that injunction have all been marked under the old patent, and it had nothing to do with the particular situation we have here. Now, I submit we cannot make a new agreement in [fol. 269] that manner.

Mr. Allen: Well, if the Court please, I think counsel's objection is more to the ultimate, in making the case, than the pertinence of this document in showing the relation-

ship between the parties. Not only that—that the letter was alleged and admitted to have been received by the parties in our summary proceedings, and was an admission on the part of Mr. Altvater of receiving this letter, and there is an allegation in the supplementary bill that this letter was received and forms part of the relationship between the parties.

Mr. Kingsland: It is not a question of receipt of the letter.

The Court: Well, I can see where it is all right as a matter of notice, if it shows the defendant had notice of the issuance of the reissued patents, and the position plaintiff has taken, of course it is as clear as can be that you cannot make evidence by sitting down and writing a lot of letters—one letter or a number of letters, or making statements that are not a part of some communication or conversation, and you cannot make evidence for yourself that way. As Mr. Kingsland says, it is a self-serving statement, but on the other hand it does show that defendant [fol. 270] was aware of the situation, and competent for that purpose.

Mr. Kingsland: If offered strictly for that purpose, for notice, it may be competent, but as I understand, it is offered to show a modification of the contract. Plaintiffs' position has been that by this letter the contract has been modified, and that is the very issue we had before Your Honor when we argued the summary proceedings. Now, if it is offered for that, I say it is immaterial.

Mr. Allen: Well, it is offered for all purposes that it shows on this letter, but it is offered as a part—as a part of the general relationship between the parties, which we believe results in this plaintiff being a licensee under the reissue patents. Now that being the case, I think that the letter is certainly competent, and whether ultimately, at the end of this case, the Court will rule one way or the other, at least this is very pertinent and competent in connection with this cause.

Mr. Kingsland: Well, counsel, I think, will admit that that letter was never answered, and I submit the broad proposition that an unanswered letter, which is a self-serving declaration, is clearly not admissible. There are

a number of cases on that proposition that say [fol. 271] [than] an unanswered letter, which contains self-serving declaration, is not an admissible piece of evidence. It is incompetent because there is nothing to be taken from the fact that the letter was not replied to. There is no significance in the fact that the letter was not replied to, and it is simply a statement of plaintiffs' position. If the Court cared for the authorities on it, I have a number of them.

The Court: Well, I don't need any authorities on that as a general proposition. It is just like a conversation, two persons in a room together, one can do all the talking he wishes, it is not binding on the other one unless the other one participates in the conversation.

Mr. Kingsland: Well, of course the courts draw a slight distinction there and say there is a little more to be taken—the fact, for illustration, where two parties are talking, one to the other, and where one party writes to the other, it happens the cases draw that distinction—they say where it is an unanswered letter, it is simply inadmissible if it is a self-serving declaration. Now, if it comes in separately for notice by you, that is something different.

The Court: I agree with most of the statements [fol. 272] by Mr. Kingsland, but we will overrule the objection and treat the evidence subject to the objection.

Q. 10. How long have you been acting as secretary for Mr. Freeman? A. Almost seven years.

Q. 11. What? A. Almost seven years.

Q. 12. Who handles the reports and payments of royalties on Mr. Freeman's license contracts under his patents, formerly 1,681,033, and the reissue patents? A. I handle it.

Q. 13. State whether or not you have received royalty reports regularly from the Western Supplies Company under its license contract with Mr. B. W. Freeman?

A. Yes, they have come in regularly.

Q. 14. And did you receive a report for December, 1936?

A. Yes, sir.

Q. 15. For January, 1937? A. Yes, sir.

Q. 16. For February, 1937? A. Yes, sir.

Q. 17. And you have received reports every month since then? A. Every month.

Mr. Kingsland: You don't need to prove that, Mr. Allen. We admit we have made reports.

Mr. Allen: All right.

Mr. Kingsland: And have made reports on dies that we are required to, under the injunction in the other [fol. 273] case.

Mr. Allen: Now, I will come back in a minute to Mr. Kingsland's statement, because I do not understand it. I want to go ahead with this witness.

Q. 18. And the checks that were received for royalties went through your hands? A. Yes, sir.

Q. 19. Were the checks marked as being paid under protest?

A. No; there was no letter or anything, or any communication of any kind accompanying the checks. All I get is the check and the report every month.

Q. 20. And the last report was for the month of—

A. December, 1939.

Q. 21. Is the report for January, 1940, due yet?

A. No, not until the 20th of this month.

Mr. Allen: Now, with regard to the relation of Mr. B. W. Freeman and the Freeman Company to this contract, Mr. Kingsland, I say, with regard to the relation of Mr. B. W. Freeman and Louis G. Freeman Company to this patent and contract, you, in your pleading, raise some question about it, but it was the same question that was raised in case 8962, and went on through to the Court of Appeals, and went through to a decree in this case, and I [fol. 274] wonder if I need to ask Miss Gibbons any questions about that in this case. In other words, I think that, so far as the parties being correct, it is already *res adjudicata* in the other litigation.

Mr. Kingsland: No. Nothing is *res adjudicata*, but I don't think there is anything to the point. We did not raise it, we did not insist on it through the other case. It is simply that the title is held by Louis G. Freeman and that the Louis G. Freeman Company has some interest in it.

Mr. Allen: That is right, and Louis G. Freeman and B. W. Freeman are the parties of the first part, and A. W.

Altwater and Western Supplies Company the party of the second part of the contract. If counsel makes no particular point of it, I won't go into that with Miss Gibbons.

Now, we were asked to produce copies of our license contracts, and I have here photostatic copies of the various license contracts. I can put them in evidence or whatever you (addressing Mr. Kingsland) wish. I can ask Miss Gibbons what the licensees are, who they are.

Mr. Kingsland: No. We want the terms of the licenses.

Mr. Allen: The terms?

[fol. 275] Mr. Kingsland: Yes.

Mr. Allen: Of licenses clear up to date?

Mr. Kingsland: Should have them, yes. That is what we asked for. If you want to turn them over to us, we will handle them on our case.

Mr. Allen: I will just put them in with Miss Gibbons then.

Mr. Kingsland: All right.

Q. 22. Now, I hand you a series of photostats, Miss Gibbons. What are they?

A. These are copies of licenses that we have under the reissue patents.

Q. 23. 20202 and 20293? A. And 20203, yes, sir.

Q. 24. Who has charge of the files in which these licenses are located at the Louis G. Freeman Company? A. I do.

Q. 25. Will you name the licensees from those license contracts?

A. Globe Machine Company. United Shoe Machinery Corporation. George Knight. Brockton Perforating Machine Company and Joseph Knight.

Q. 26. That is all one document, that third one?

A. That is all one document. That is a supplemental.

Q. 27. The next one? A. St. Louis Cutting Die Company.

[fol. 276] Q. 28. Next?

A. St. Louis Cutting Die, supplemental. Progressive Service Company, St. Louis, and supplemental with Pro-

gressive Service. Independent Die and Supply Company. Western Supplies Company.

Q. 29. You won't need to put that in.

A. Peterson Cutting Die Company.

Q. 30. Of Milwaukee?

A. Milwaukee, yes, sir. Chicago Cutting Die Company. Bee Machine Company. Progressive Service Company, Harrisburg. Manufacturers Supplies Company. Binghamton Die & Machine Company. Harold G. O'Brien.

Q. 31. Now, the license contracts previously to Harold G. O'Brien are all dated prior to October, 1936, that is, there is one here October 1, 1936; all the rest of them are earlier than that? A. Yes, sir.

Q. 32. Is that correct? A. Yes, sir.

Mr. Allen: The documents show that on their faces.

(Mr. Kingsland produces a document.)

Mr. Allen: What is that one?

Mr. Kingsland: That is that supplemental. I would like that, too.

Q. 33. Now then, with regard to these license contracts, what is your basis for stating, as you did, that they were [fol. 277] under your reissue patents 20202 and 20203?

A. Those are the patents that they apply to there.

Q. 34. State whether or not you, in behalf of Mr. Freeman, notified these various concerns of the grant of the reissue letters patent. A. We did.

Q. 35. And have the concerns continued to pay royalties as before? A. Yes, sir.

Q. 36. I am referring to the licensees in these documents.

A. Yes, sir.

Mr. Allen: (Addressing Mr. Kingsland) Now, do you want the license contracts since the grant of the reissues, the ones that we have granted since then?

Mr. Kingsland: I would like to have the whole license structure, Mr. Allen. We will put it in in our case, if you would rather.

Q. 37. Well, go ahead with the list of the licensees on these documents. Harold G. O'Brien, you mentioned.

A. Yes, sir.

Q. 38. That is a license under reissues 20203 and 20202, and 20206, is that correct? A. Yes, sir.

Mr. Rogers: The record will show that, Mr. Allen.

[fol. 278] Mr. Allen: Yes.

Mr. Rogers: And the paper will.

Q. 39. And the next is? A. Universal Die Company.

Q. 40. Of St. Louis. The next is?

A. Daniels Machine & Die Company.

Q. 41. The next is? A. Marlboro Machine Die Company.

Q. 42. And the next is? A. Premier Machine Company.

Q. 43. Those are all of the licensees of Freeman under patents 20202 and 20203? A. Yes.

Mr. Allen: If counsel for the other side wishes to introduce those license contracts in connection with their case, why they may do so.

Q. 44. Now, in connection with those license contracts that you mentioned, have any been terminated? You better let her see those again.

(Mr. Kingsland hands the documents to the witness.)

Q. 45. Are any of these concerns no longer licensed?

A. Bee Machine are not, and neither is Brockton Perforating Machine Company.

Mr. Allen: With regard to the Bee Machine Company, if the Court please, I refer you to Judge Nevin's decision in the case of Bee against the Freeman Company, in which [fol. 279] the situation with regard to the cancellation of that contract was brought out.

Q. 46. Now, who cancelled the Bee Machine Company license? A. Mr. Freeman.

Q. 47. When?

A. I think—I cannot remember the date just offhand.

Q. 48. Well, was it prior—was the first notice of cancellation prior to the grant of the reissue letters patent?

A. Oh, I think that notice was in about December, 1935.

Q. 49. Now, with regard to the Brockton Company, in what manner was that license terminated?

A. Well, Mr. Freeman cancelled that.

Q. 50. State whether or not it would be more accurate

to say Mr. Freeman stated he was willing to cancel it, and the Brockton Perforating Company said that was all right with them? A. That is the exact circumstance.

Q. 51. I will hand you two letters and two shoe parts marked for identification as Plaintiffs' Exhibits Nos. 39 and 40. Please state what those two letters are.

A. The first one is a letter from the Chicago Cutting Die Company to the Freeman Company, and the second one is a letter from Mr. Freeman to the Chicago Cutting Die Company, and the first one tells that they are mailing us the uppers that they secured, and the second one is acknowledging receipt of the uppers.

[fol. 280] Q. 52. Now, where have those uppers been since they have been secured? A. Attached to this file.

Q. 53. And in whose charge has the file been? A. In mine.

Q. 54. And when were they received?

A. The uppers were received at this date, August 16, 1934.

Q. 55. And are these two uppers the uppers that you received? A. Yes, sir.

Mr. Allen: I would like to have the correspondence received in evidence.

Mr. Kingsland: Now, if the Court please, that is objectionable. It is correspondence between third parties and this plaintiff. No identification of the source of these uppers, and the only purpose, I suppose, is to attempt to identify them. It is not competent for that purpose.

The Court: Sustain the objection.

Mr. Allen: May I have the letters marked for identification?

The Court: Yes, sir.

Mr. Allen: All right.

(The said documents were marked by the reporter as Plaintiffs' Exhibits No. 44 and 45, respectively, for identification.)

[fol. 281] Mr. Allen: Now, Mr. Kingsland made some statement—I was trying to find it in the record—with regard to saying that the defendant continued to pay the royalties as covered by the injunction in this court. Well, now,

you don't mean to say you have paid royalties on Model-T machines or Model-T dies, do you? I did not understand what you meant.

Mr. Kingsland: We were under that contract and we were continuing under the contract that was adjudicated and that injunction.

Mr. Allen: That was what you meant by it. I just wondered what you meant by it.

Mr. Kingsland: That was what I had in mind.

Mr. Allen: Well, that is all from this witness.

Mr. Kingsland: Mr. Allen, is this witness to be here?

Mr. Allen: Yes, she can be here tomorrow, if that is what you mean.

Mr. Kingsland: What I had in mind was this: we had asked for these contracts some time ago, and we just got them today. I don't know—I asked Mr. Allen for them before, and, if the Court please, we would like to reserve cross examination of this witness until we have had a chance to examine these contracts. Now, I understand from Mr. Allen she will be in court. May I do that?

Mr. Allen: She will be here tomorrow.

The Court: Yes.

Mr. Kingsland: I think it will save time. That is all.

The Court: It may be so understood.

Mr. Kingsland: There may not be any examination to amount to anything, but we may want to check the contracts.

The Court: Is that all?

Mr. Allen: That is all from this witness. That is the plaintiffs' prima facie case.

The Court: We will take a recess of a few minutes, five or ten minutes.

After a brief recess, at 3:30 P. M., Tuesday, January 6, 1940, a recess was had until 10:00 o'clock A. M. Wednesday, January 7, 1940.

[fol. 283] Met pursuant to recess from January 6, 1940, at 10:00 o'clock A. M., Wednesday, January 7, 1940, and the following proceedings were had:

The Court: You may proceed, gentlemen, with the case on trial.

Mr. Allen: If the Court please, I think—one of my witnesses is still subject to cross examination, and I have a witness that I got to come down from Chicago last night, which will take about five minutes, and although technically I have closed my case, I would like to put him on, I think, before the cross examination of Miss Gibbons.

The Court: All right. Go ahead.

WILLIAM ANDERSON,

a witness of lawful age, being duly produced, sworn and examined, testified on behalf of the plaintiffs as follows:

Direct Examination.

By Mr. Allen:

Q. 1. Will you please state your full name?

A. William Anderson.

Q. 2. And with what company are you associated?

A. Chicago Cutting Die.

Q. 3. Of Chicago, Illinois? A. Yes, sir.

[fol. 284] Q. 4. Were you associated with that company in the year 1934? A. Yes, I was.

Q. 5. State whether or not, in the year 1934, you procured a certain die which you sent to Mr. Freeman.

A. Yes.

Q. 6. From whom did you procure that die?

A. From the Advance Shoe Company.

Q. 7. Will you look at this die marked Exhibit No. 2 and see if you can identify it? A. Yes, I can identify it.

Q. 8. Now, what is this die?

A. Well, it is what we term a flat bed die.

Q. 9. I mean, state whether or not it is the one which you sent to Mr. Freeman?

A. Yes, that is the one I sent to Mr. Freeman.

Q. 10. And was the die broken, do you recall, when you sent it to him? A. No, it was not broken.

Q. 11. Now, at the time in 1934, state whether or not you sent any shoe parts to Mr. Freeman.

A. Well, there was two uppers.

Q. 12. Two uppers. Where did those uppers come from?

A. They also came from the Advance Shoe Company.

Q. 13. Were you at the Advance Shoe Company when those uppers were picked out? A. Yes.

[fol. 285] Q. 14. And where were the uppers located?

A. Well, they were around the cut-out machine where this die is used.

Q. 15. Now, I will show you two uppers, and see if you can say what they are.

A. Well, they are two uppers, one is perforated and one is not perforated.

Q. 16. Do you recognize them, Mr. Anderson?

A. Yes, I do.

Q. 17. And state whether or not those are the uppers that you sent to Mr. Freeman from the Advance Shoe Company. A. Yes, those are the uppers.

Mr. Allen: The uppers just shown to the witness are already marked for identification in this case as Plaintiffs' Exhibits Nos. 39 and 40.

Q. 18. Look at the upper marked for identification No. 40 and state whether you find any defect in it.

A. Well, this upper here was perforated, and of course it was spoiled in the operation of perforating.

Q. 19. Can you point out where it was spoiled?

A. Well, the perforating tube got into that collar there slightly, or, rather, too close to the collar.

Q. 20. To the collar? A. Yes.

Q. 21. You are now referring to the line of perforations, the fourth line of perforations from the toe, on the right- [fol. 286] hand side of it? A. That is right, yes.

Q. 22. State whether or not that assists you in recognizing this particular upper.

A. Well, that is part of it, of course.

Q. 23. Yes.

A. That was the first thing was called to my attention when I was called over there.

Q. 24. Now, can you show us on this die, Exhibit No. 2, how the upper marked for identification No. 39 goes in the die?

A. Well, this is, of course, the way it goes in, and that is the way you have the line-up of the shoe (demonstrating).

Mr. Allen: The witness has mounted the upper in the die.

Q. 25. I would like to show you a photograph. If you will look closely at this photograph, marked Plaintiffs' Exhibit No. 41, you will see some ink lines drawn in pen and ink. A. Yes.

Q. 26. State whether or not, in mounting the upper in the die as you have just done, those ink lines are the lines which have lined up that part of the work.

A. That is right.

Q. 27. What do you call the decoration on this shoe upper which you have lined up with the two inwardly extending prongs on the side?

[fol. 287] A. Well, I term it an applique. Might term it almost anything, but that is the term that is always used.

Q. 28. Applique? A. Yes.

Mr. Allen: That is all. Just one minute, if the Court please, I should now like to offer in evidence the uppers marked for identification as Exhibit No. 39 and marked for identification as Exhibit No. 40.

(The said exhibits were heretofore offered at folio page 253 of this record.)

Cross Examination.

By Mr. Kingsland:

XQ. 1. Mr. Anderson, you do not know, do you, that this die, Plaintiffs' Exhibit No. 2, was used to cut out the shoe parts, Plaintiffs' Exhibit No. 40? A. Yes, I do.

XQ. 2. How do you know that?

A. Well, I got a telephone call from Advance Shoe, and he brought me over to the machine where this die

was, and he wanted me to put on what we call the hinge mask on this particular die.

XQ. 3. In other words, he wanted a hinge mask instead of this plate?

A. That is right. And he said, "I spoiled some shoes".

XQ. 4. Yes. A. And he handed me that shoe.

[fol. 288] XQ. 5. That is, he spoiled these shoes?

A. That is right.

XQ. 6. Do you think it was these shoes? A. Yes.

XQ. 7. Did you ever see shoes made on that die?

A. Well, he put the shoe in and showed me how it fitted in.

XQ. 8. You mean this very pair?

A. Well, yes—well, of course it is five years ago.

XQ. 9. Yes. You cannot remember that now?

A. Cannot remember that.

XQ. 10. No. A. But I think that was the shoe.

XQ. 11. You think it was? A. Yes.

XQ. 12. Now, as I understand it, the reason that you remember this is that this company from whom you got it wanted you to put a hinge plate—

A. (Interrupting) That is right.

XQ. 13. On this die? A. Yes.

XQ. 14. Now, you understand, of course, in these elevated dies in this case, in order that this upper plate—that is the plate on the top. A. Yes.

XQ. 15. Stands up away from the work and it does not come down and clamp it like that hinge plate would, isn't that true? A. Well, that is true. It would not clamp it.

XQ. 16. Yes. In other words, this plate that we have on this die, Plaintiffs' Exhibit No. 2, is different in that respect from the hinged plate that he wanted you to put on there? A. Well—

XQ. 17. (Interrupting) Isn't that true?

A. As far as I know.

XQ. 18. Not as far as you know—you know that to be true, don't you? A. Well—

XQ. 19. (Interrupting) Just say yes to me, because you know that is true, don't you? A. Well, I will say so.

XQ. 20. Yes. And that is a different arrangement from this, is it not, that is, where they put a hinged plate, put a window in the plate? A. Well, it is different.

XQ. 21. Quite different? A. Yes.

XQ. 22. And you speak from the standpoint now of one who knows construction of dies, don't you?

A. I don't know how much I know about it.

XQ. 23. Well, you have been at the business some time?

A. Well, I have been at it for some years, yes.

XQ. 24. So you would not call this plate on the top here a clamp, would you—a clamp?

A. No, I would not call that plate on the top a clamp.

Mr. Kingsland: That is right. That is all.

[fol. 290] Redirect Examination.

By Mr. Allen:

RDQ. 1. Would you call it a gauge plate?

A. Well, yes, it is a gauge plate, yes.

The Court: Is that all, Mr. Allen?

Mr. Allen: That is all, yes, sir.

Mr. Allen: Now if Miss Gibbons will resume the stand.

(The witness Mary Gibbons resumes the witness stand.)

Mr. Kingsland: Mr. Allen, if you want me to admit that this stripper die which you now have marked Plaintiffs' Exhibit No. 2 was presented in the accounting proceedings before Mr. Elliott as Exhibit M-202, and that you withdrew it and substituted a photograph for it before Mr. Elliott, I am perfectly willing to admit that.

Mr. Allen: Yes.

Mr. Kingsland: You asked me about it this morning.

Mr. Allen: Yes.

Mr. Kingsland: And I thought maybe I could save a little time.

Mr. Allen: All right. I just wanted—the witness wanted to correct herself, if she gave the impression that this par-

[fol. 291] ticular die, M-202, and those uppers had remained constantly in her file. As a matter of fact, they were sent down to St. Louis and were before the Master during examination of Mr. Altvater in September, 1934. Then in August, 1935, a stipulation was entered into, a photograph substituted for the die and the two uppers, and then the die and the two uppers withdrawn from the files, and I think perhaps we had better mark this stipulation and photograph as an exhibit, and of course that explains the history.

Mr. Kingsland: I don't see the materiality of it, but I have no objection.

Mr. Allen: See, I am offering both the die itself and the uppers which are attached on to there.

Mr. Kingsland: Well, as a matter of fact, only the die was introduced, but I assume that the uppers were there, as I recall.

Mr. Allen: No, that is not quite accurate, Mr. Kingsland. Here is the introduction before the Master;

"So I would like to introduce the two uppers, one uncut and the other cut, as part of this exhibit (indicating Plaintiffs' Exhibit M-202), and I will tie them on the exhibit, so they will remain intact."

Mr. Kingsland: Well, if that is the fact.

Mr. Allen: Yes. May I then have it marked as [fol. 292] Plaintiffs' Exhibit No. 46?

(The said stipulation and photograph were marked by the reporter as Plaintiffs' Exhibit No. 46.)

Plaintiffs' Exhibit No. 46 Offered in Evidence.

[fol. 292b] (Plaintiffs' Exhibit 46.)

Stipulation.

In the District Court of the United States for the Eastern
Judicial District of Missouri, Eastern Division

Benjamin W. Freeman and
The Louis G. Freeman Company,
Plaintiffs,

v.

A. W. Altvater and
Western Supplies Company,
Defendants.

} In Equity 8962
Before the Master

It is hereby stipulated by and between the parties to the above suit, by their attorneys of record, the Master consenting, that Plaintiffs be permitted to withdraw their Exhibit No. M-202 and substitute therefor photographs of the same, Defendants reserving the right to require Plaintiffs to produce said exhibit upon reasonable notice.

JOHN H. BRUNINGA,
Counsel for Plaintiffs.

LAWRENCE C. KINGSLAND,
Counsel for Defendants.

Approved

BRUCE S. ELLIOTT,
Special Master.

St. Louis, Missouri
September 7, 1935



[fol. 293] Mr. Allen: Mr. Anderson is now going to return to Chicago.

Mr. Kingsland: That is all right. Are you through with the witness?

Mr. Allen: Yes.

MARY GIBBONS,

a witness of lawful age, having been heretofore duly produced, sworn and examined, upon being recalled to the witness stand, testified further on behalf of the plaintiffs as follows:

Cross Examination.

By Mr. Kingsland:

XQ. 1. Miss Gibbons, you testified yesterday that after the reissues came out, that all of the licensees accepted the reissues and continued with the license contracts.

A. I testified that the Western Supplies Company continued.

XQ. 2. Well, excluding them then. Now, in addition to the Western Supplies Company, what other companies did not continue under the original licenses?

A. Well, the Bee Machine Company license was cancelled, and so was that of the Brockton Perforating Machine Company.

[fol. 294] XQ. 3. And they did not continue to pay royalty?

A. No, sir.

XQ. 4. Now then, you told us, I believe, that they were all renewed. Now, what method was used to renew them, was there correspondence covering that?

A. There was a notice sent to each of those licensees.

XQ. 5. Yes, and did they reply to that notice?

A. Yes, I think they did.

XQ. 6. Well, part of what you said yesterday then was covered by the correspondence that you now refer to?

A. Yes, sir.

XQ. 7. So what you testified to was what was in fact in this correspondence that you now refer to, that is, it was covered in this correspondence? A. Yes, sir.

XQ. 8. Now, will you tell us whether you have now produced all of the licenses with respect to making the dies—

I might add that Mr. Allen presented an additional license this morning, presented additional copy of an agreement this morning between the George Knight Company, under date of February 15, 1939. Now, understanding that I have possession of this, does that, together with the licenses that you identified yesterday, represent all of the licenses? A. Yes, sir.

[fol. 295] XQ. 9. Now, will you tell me what arrangement is made with respect to the machines, are they sold or are they leased? A. Do you mean our machines?

XQ. 10. Your machines, yes.

A. Some are sold and some are leased.

XQ. 11. Now, do those lease agreements have anything to do with the terms upon which they may be used, the machines themselves be used?

Mr. Allen: Well, now, if the Court please, I object to the question. It forms no part of the direct examination of this witness, nor do I see that it is germane to the present controversy, what plaintiff chooses—what the plaintiff Louis G. Freeman Company chooses to do with its machines, what has that got to do with this controversy here?

Mr. Kingsland: Mr. Allen, as I understand, this witness has now testified that these were all licenses under this patent.

Mr. Allen: Yes.

Mr. Kingsland: Now, some of these machines, as I understand, are leased, and they do have conditions with respect to use, which of course would be a license under these patents. If that is true, I want to know it.

Mr. Allen: And still I do not see the point of the [fol. 296] question.

The Court: Do you want a ruling on it? I do not see it either. Overrule the objection. There are many things about the case I don't see.

Mr. Kingsland: Your Honor's ruling?

The Court: Overrule the objection.

XQ. 12. Will you answer, please?

A. Well, I really don't know. I am not that familiar

with the context of the lease agreements to tell you, word for word, what they say.

XQ. 13. Well, you have no copies of those here?

A. No, sir, I don't.

XQ. 14. Do you know generally whether they restrict the use of machines to certain dies?

A. Well, I could not say that exactly, either.

XQ. 15. Well, what is your best recollection on it?

A. I would not know.

XQ. 16. You have no information on it? A. No, sir.

XQ. 17. Do you handle those agreements the same as you do the agreements with respect to the dies?

A. Well, the only way in which I handle them is that we send them out for signature and they come in, and I file them, but I don't read them over, except, of course, as to terms and dates and names of companies, and see that [fol. 297] they are properly signed, and things like that.

Mr. Kingsland: Well, now, if the Court please, in view of the testimony of the witness that the conclusions stated by her yesterday with respect to the renewal of these licenses were covered by writing, and her statement now that that was by correspondence, I move that that testimony with respect to the renewal of licenses be stricken, it not being based on the best evidence.

Mr. Allen: If the Court please, this witness testified that these licenses went on, that they wrote, she said in so many words that they wrote to licensees and notified them of the reissue letters patent, and that the licensees continued to pay royalty as before, and that was her testimony.

Mr. Kingsland: But her testimony this morning is that there were renewals by the licensees. I have no objection to her saying that she notified them, because that she did herself, but she drew the conclusion that these licenses had been renewed by all except the three Companies, and her testimony this morning, as far as I understand, is that that renewal was in writing, and therefore her testimony based on secondary evidence, her own memory, where the original is now available, seems to me to be incompetent, and on [fol. 298] that basis I ask that it be stricken.

The Court: Sustain the motion.

Mr. Allen: All right. Now then, if the Court please, I ask leave, in view of that circumstance, and putting in the testimony yesterday no objection was made at the time, I ask leave to have this witness procure the letters that were sent out to the other licensees, so that I can produce them before this Court as part of this record.

The Court: All right. You may have that privilege, if you wish. Why is this so important?

Mr. Allen: I don't know that it is important at all, but still I don't want the witness' testimony stricken out.

The Court: What difference does it make whether these other people renewed the licenses or did not renew them?

Mr. Allen: Well, they continued to pay the royalties. That was the important feature that I thought there was to it.

The Court: I think the witness stated that the Western Supplies Company had renewed the license.

Mr. Allen: Yes, in exactly the same way. I think, Your [fol. 299] Honor, to rule out her testimony when, as the testimony was given, it was perfectly apparent that they had written and notified these other licensees of the existence of the reissue letters patent, that if counsel had made a timely objection at that time, I could have saved the situation, but he did not do it.

Mr. Kingsland: Now, Mr. Allen—

Mr. Allen: He waits until this morning and asks her if letters were sent out, and she says yes, and in some instances she says we received replies. Now then, can that make her testimony incompetent, to be stricken out today? It seems to me that that goes a little bit far, Your Honor.

The Court: Well, it is just a conclusion, isn't it, it is just an opinion of the witness as to whether or not they have been renewed, because the witness has said that the Western Supplies contract was renewed, and that seems to be one of the principal issues in this case.

Mr. Allen: All right. I would just like for a moment to see what she said.

The Court: She did not say that yesterday. She said that this morning.

Mr. Allen: Well, what he has asked to do is to have her testimony yesterday stricken out, that is what he is [fol. 300] asking for.

The Court: Yes, that is what he asked for. Don't you have record enough here today, that the witness can look at these license agreements and tell you they were renewed, if they were renewed?

Mr. Kingsland: Her statement was, Your Honor, that they were all renewed, with the exception of the Bee Manufacturing Company, Brockton Company, and this morning, with reference to the Western. Now, my point, yesterday, it was perfectly true that she testified that they notified all the licensees—I have no objection to that, but when she draws the conclusion that the licenses were renewed under the reissue patents, and that appears to be based upon correspondence, then I think that the record should show the correspondence, to justify any such conclusion.

Mr. Allen: Yes, but what I want to see [if] just exactly what the witness said yesterday, because I want to know that.

The Court: I wish you would tell me what difference it makes whether these other people renewed these license agreements or not.

Mr. Kingsland: Well, in my view, it does not, but as I understand Mr. Allen's position, he is trying to build an acquiescence by the public by the acceptance of the [fol. 301] reissue patents. That, I don't believe is justified.

Mr. Allen: I did not—I produced those license contracts because the defendant asked for them in interrogatories filed back in 1935.

Mr. Kingsland: That is all perfectly true, but then you went further and examined the witness with respect to the renewal under the reissue.

Mr. Allen: Let me find just what she said, if you don't mind. It will only take a minute.

What I asked her was this, if the Court please:

"State whether or not you, in behalf of Mr. Freeman, notified these various concerns of the grant of the reissue letters patent."

Answer: "We did."

Question: "And have the concerns continued to pay royalties as before?"

Answer: "Yes, sir."

Now, do you want that stricken out, is that your prayer, sir?

Mr. Kingsland: Well, she concluded that they renewed.

Mr. Allen: I don't see that she did. Could I have the objection of counsel—I mean his motion read to strike? First I ask, Mr. Kingsland, your objection does not go to [fol. 302] the part that I just read?

Mr. Kingsland: Not that. I understood that the witness had said, and my notes showed that she concluded that the licenses had been continued under the reissue. Now, I might ask her:

XQ. 18. Did you intend to be understood yesterday to state that the licenses that had existed under the original patent, with the companies that you have stated this morning—the Bee, the Brockton, and the Western, were renewed?

A. Well, from the fact that they continued to pay royalty showed that they accepted.

XQ. 19. And was it on that basis alone that you intended to put that conclusion? A. Yes, sir.

XQ. 20. And you had no reference in your testimony yesterday to any correspondence?

A. Well, I know that we notified all these people.

XQ. 21. Well, what thought did you have in mind when you made that statement, or did you use as a basis of that statement the fact that some of them had replied to that notice of the reissues?

A. Well, no, sir. The only thing that I had in mind was that they were still paying royalty and that we had notified them.

[fol. 303] XQ. 22. You had notified them and they continued to pay royalty? A. Yes, sir.

XQ. 23. Now, there is no other basis for any conclusion that they continued under the reissue patents after the original patent had been surrendered, is that right?

A. Well, I am pretty sure that some of them replied.

XQ. 24. Well, did you use that as a basis of saying that they had continued under the reissue patents, did you have in mind that correspondence?

A. Well, I really don't know now.

XQ. 25. Well, now, you wish to be understood at the present time that the only reason that you have for saying that it was a continuation under the reissue patents was that you notified the licensees and the licensees continued to pay royalty, is that it? A. Yes, sir.

XQ. 26. And that is all? A. Yes, sir.

Mr. Kingsland: I will withdraw the motion then.

Mr. Allen: All right.

XQ. 27. Now, will you tell me where these machine licenses and agreements are, that is, are they in your custody?

A. You mean our regular leases on leased machines?

XQ. 28. Yes, on machines placed.

A. They are in our office.

XQ. 29. Have you any copies here? A. No, sir.

[fol. 304] Mr. Kingsland: I would like to make a formal request of counsel to produce those before the close of the case.

Mr. Allen: Well, I have no objection to the counsel having a copy of one of those, but what earthly basis they could find in this record, I don't see. I can tell you right offhand what those lease documents show, if you want to know.

Mr. Kingsland: Well, will you be willing to produce them?

Mr. Allen: Yes, I will produce one, but I don't like to agree it is competent because I produce it.

Mr. Kingsland: Well, there wouldn't be any implication in that. That is all.

Mr. Kingsland: Now, if the Court please, at this time we would like to file the following amendment to the answer, based on the contracts that have been produced and which first came into our possession last evening. The amendment raises the question of unclean hands, by reason of a monopoly that exists as a result of the agreements that have been issued under both the original and the reissue patents. These contracts provide that the machines shall [fol. 305] be used only with the dies made under the patent. They further provide, at least some of them do, that no other dies except those licensed shall be made by the licensees. Now, there are several recent decisions that support this as a complete defense to a bill.

The Court: I don't know why we have to argue it now, Mr. Kingsland.

Mr. Kingsland: I don't want to argue it.

The Court: If you wish to amend your answer, I see no objection to amending your answer.

Mr. Kingsland: All right.

The Court: Do you, Mr. Allen?

Mr. Allen: No, I see no reason why he cannot amend it.

The Court: All right. File your amendment.

Plaintiffs' prima facie case closed.

[fol. 306] And thereupon the defendants, to sustain the issues in their behalf, offered the following evidence:

Mr. Rogers: If Your Honor please, I should like to offer in evidence formally all of the answers to interrogatories that were filed herein. I think it will be unnecessary to give them any exhibit number.

Then I should like to offer in evidence all of the contract copies that were brought into the case by counsel, in response to the interrogatories. I do not know just how many there are, but I request that they be marked Defendants' Exhibits A-1, A-2, A-3, and so forth, down through the final list.

(The said offer, consists of twenty-three photostatic copies of documents, which have been marked by the reporter as Defendants' Exhibits Nos. A-1 to A-23, both inclusive, and are as follows:) ([Physical] Exhibits.)

Defendants'

**Exhibit
Number**

Description

- | | |
|----------------|--|
| A-1 | License agreement made December 1, 1938, between Benjamin W. Freeman and the Globe Machine Company, of Massachusetts. |
| A-2 | License agreement made March 29, 1928, between the Louis G. Freeman Company and Benjamin W. Freeman, licensors, and United Shoe Machinery Corporation of Paterson, New Jersey, and United Shoe Machinery Corporation of Portland, Maine, doing business in Boston, Massachusetts. |
| [fol. 307] A-3 | Agreement made March 28, 1928, between The Louis G. Freeman Company and Benjamin W. Freeman, parties of the first part, and George Knight of Brockton, Massachusetts, doing business at Brockton as George Knight and Company, party of the second part, and the Brockton Perforating Machine Company, of Brockton, Massachusetts, and Joseph C. Knight, president of said company, parties of the third part. |
| A-4 | Supplementary agreement made March 29, 1928, between Benjamin W. Freeman and L. G. Freeman Company, and Joseph C. Knight, of Brockton, Massachusetts. |
| A-5 | License contract made October 1, 1929, between Benjamin W. Freeman, licensor, and The St. Louis Cutting Die Company, of St. Louis, Missouri, and Charles A. Messmer of St. Louis. |
| A-6 | Supplemental agreement made October 1, 1929, between Benjamin W. Freeman, licensor, and The St. Louis Cutting Die Company and Charles A. Messmer, of St. Louis, Missouri. |

**Defendants'
Exhibit
Number**

Description

- | | |
|-----------------|--|
| A-7 | License contract made April 1, 1930, between Benjamin W. Freeman, Licensor, and The Progressive Service Company, of St. Louis, Missouri. |
| A-8 | Supplemental agreement made April 1, 1920, between Benjamin W. Freeman, licensor, and Progressive Service Company, of Missouri. |
| A-9 | License contract made October 13, 1930, between Benjamin W. Freeman, licensor, and the Independent Die and Supply Company of St. Louis, Missouri. |
| A-10 | License contract made January 1, 1929, between Benjamin W. Freeman, licensor, and Western Supplies Company and Arthur W. Altvater, of St. Louis, Missouri. |
| [fol. 308] A-11 | License contract made April 14, 1934, between Benjamin W. Freeman, licensor, and the Peterson Cutting Die Company, of Milwaukee, Wisconsin. |
| A-12 | License contract made November 24, 1928, between Benjamin W. Freeman, licensor, and the Chicago Cutting Die Company of Chicago, Illinois. |
| A-13 | License contract made November 24, 1933, between Benjamin W. Freeman, licensor, and the Bee Machine Company of Lynn, Massachusetts. |
| A-14 | Supplemental agreements consisting of a letter dated November 29, 1933, from Benjamin W. Freeman to Bee Machine Company, Lynn, Massachusetts, and a letter dated November 29, 1933, from Bee Machine Company to Benjamin W. Freeman. |
| A-15 | License agreement made October 1, 1936, between Benjamin W. Freeman, licensor, |

**Defendants'
Exhibit
Number**

Description

and Progressive Service Company, of St. Louis, Missouri, together with a letter dated June 16, 1939, from the Louis G. Freeman Company, Benjamin W. Freeman, to Progressive Service Company, Harrisburg, Pennsylvania.

A-16 License contract made December 1, 1923, between the Louis G. Freeman Company, licensor, and the Manufacturers Supplies Company, of St. Louis, Missouri.

A-17 License contract made April 18, 1935, between Benjamin W. Freeman, licensor, and Frank W. Bowe, doing business as the Binghamton Die and Machine Company of Binghamton, New York.

[fol. 309] A-18 Articles of agreement made February 15, 1939, between the Louis G. Freeman Company and Benjamin W. Freeman, licensor, and George Knight, Chesterton S. Knight, F. Stuart Knight, and Carlton E. Knight, doing business as a co-partnership under the name of Geo. Knight and Company, as successors in business to George Knight, and Geo. Knight and Company, Inc., licensee.

A-19 License contract made November 1, 1938, between Benjamin W. Freeman, licensor, and Harold G. O'Brien, Auburn, Maine.

A-20 License contract made October 10, 1939, between Benjamin W. Freeman, licensor, and Universal Die Company, of St. Louis, Missouri, and Frank J. Hardwig.

A-21 License contract made November 3, 1938, between Benjamin W. Freeman, licensor, and Daniels Machine and Die Company, Incorporated, at Haverhill, Massachusetts, and N. J. Daniels.

Defendants'
Exhibit
Number

Description

- | | |
|------|--|
| A-22 | License contract made June 17, 1939, between Benjamin W. Freeman, licensor, and Marlboro Machine Die Company, Incorporated, of Marlboro, Massachusetts, and Charles E. Newton. |
| A-23 | License contract made November 11, 1939, between Benjamin W. Freeman, licensor, and Premier Machine Company, Incorporated, of Boston, Massachusetts. |

Mr. Rogers: Now, if the Court will further please, yesterday reference was made to certain proceedings in regard to these reissues and a notice. A letter was introduced, or [fol. 310] at least referred to, from either Mr. Allen or Mr. Freeman to Western Supplies Company, concerning the granting of the reissues. In sequence, I should like to offer a letter, of which I have a copy, and I will ask Mr. Allen to agree to its genuineness, of February 22, 1937, from counsel for defendants, Mr. Kingsland, to Mr. Allen.

(Mr. Allen examines the said document, and was thereupon marked by the reporter as Defendants' Exhibit B.)

Defendants' Exhibit B Offered in Evidence.

[fol. 311]

(Defendants' Exhibit B.)

February 22, 1937.

Marston Allen, Esq.
Gwynne Building
Cincinnati, Ohio.

Dear Mr. Allen:—

In re: Freeman v. Altvater.

The surrender of the Freeman patent and the obtaining of the reissues, as well as the decision in the First Circuit in the Premier suit, have presented such a complication of the situation so far as concerns the relationship of the Western Supplies Company under the license granted on

the original patent, that it would seem to me it would be advisable for the parties to get together and discuss the whole matter, with a view to disposing of it without further litigation.

While I have certain definite ideas about an affirmative position that Mr. Altvater could take, it would simply result in more law suits between the parties. I certainly feel that the situation is one where some amicable solution may be reached by a frank exchange of views between us and, with that in view, I was wondering if you and Mr. Freeman could arrange to meet with Mr. Altvater and myself, here in St. Louis, sometime within the near future.

At that conference, I can definitely outline my views of the matter and would be glad to get your point of view, with the hope that the dispute that has existed between our respective clients over such a long time, might be composed without the necessity of further litigation.

I expect to be in St. Louis for the next ten days, and will be glad to hear from you as to whether or not a conference can be arranged.

Very truly yours,

LCK-S.
cc A.W.A.

LAWRENCE C. KINGSLAND.

[fol. 312] Mr. Rogers: I should like to call your Honor's attention very briefly to the subject matter of this letter which says:

"The surrender of the Freeman Patent and the obtaining of the reissues, as well as the decision in the First Circuit in the Premier suit, have presented such a complication of the situation so far as concerns the relationship of the Western Supplies Company under the license * * *, that it would seem to me it would be advisable for the parties to get together and discuss the whole matter, with a view to disposing of it without further litigation."

That was February, 1937. To this letter, Mr. Allen [fol. 313] responded in a letter, February 24, 1937, in which

he stated that the suggestion was in line with proper policy; however, he said that it would be impossible to make a date in the matter, because of the fact that Mr. Freeman was in Florida at the time and would not be back for some time. Mr. Allen said that he would write as promptly as he could. No letter was had from Mr. Allen until March 25, 1937, when Mr. Allen wrote, saying that no conference could be arranged in St. Louis, but then after that, there were about two telegrams—one from Mr. Kingsland to Mr. Allen, March 29th, asking whether on Thursday or Saturday of that week they could have a conference at Cincinnati, and that was agreed to in a telegram from Mr. Allen to Mr. Kingsland, March 29th. I should like to offer in evidence as Defendants' Exhibit B, Mr. Kingsland's letter of February 22, 1937.

(The Defendants' Exhibit B has been previously offered in evidence.)

Mr. Rogers: I should like to offer as Defendants' Exhibit C Mr. Allen's response of February 24, 1937.

(The said document was marked by the reporter as Defendants' Exhibit C.)

Defendants' Exhibit C offered in evidence.

[fol. 314] (Defendants' Exhibit C.)

Feb. 24th, 1937.

Mr. Lawrence C. Kingsland,
705 Olive St.,
St. Louis, Mo.

Dear Sir:

RE: Freeman vs. Altvater.

I have yours of February 22nd, and to me the suggestion seems in line with a proper policy at any time in a patent litigation.

I cannot make any date in the matter because Mr. Freeman is in Florida, and I have no way of communicating with him. He went down there with his son and in con-

nection with settling some estate matters of his father who died a short time ago.

I will write to you as promptly as I can, however.

Yours very truly,

MARSTON ALLEN.

MA*P

Copy to AWA-2-25-37.

[fol. 315] Mr. Rogers: As Defendants' Exhibit D, Mr. Allen's letter of March 25, 1937.

(The said document was marked by the reporter as Defendants' Exhibit D.)

Defendants' Exhibit D offered in evidence.

[fol. 316] (Defendants' Exhibit D.)

March 25th, 1937.

Mr. Lawrence C. Kingsland,
705 Olive St.,
St. Louis, Mo.

Dear Sir:

With reference to the correspondence re talking over the entire Western Supplies, Altvater-Freeman matter, I write to say that Mr. Freeman has been in my office today, having returned from the South. He does not see any chance of coming down to St. Louis at this time, but says that any time when you and Mr. Altvater can come to Cincinnati, when he and I are here, that it will be entirely satisfactory to him to talk the matters over.

I may say that I have delayed taking any further steps in the accounting, awaiting this possibility, and would appreciate an early letter or wire from you suggesting a date for a conference here.

Yours very truly,

MARSTON ALLEN.

MA*P

Phoned A. W. A.—out of town until Monday.

[fol. 317] Mr. Rogers: As Defendants' Exhibit E-1, Mr. Kingsland's wire of March 29, 1937.

(The said document was marked by the reporter as Defendants' Exhibit E-1.)

Defendants' Exhibit E-1 Offered in Evidence.

[fol. 318] (Defendants' Exhibit E-1.)

Western Union Telegram.

Day Letter

Marston Allen
c/o Allen & Allen
Gwynne Building
Cincinnati, Ohio.

St. Louis Mo. March 29, 1937

Re your letter March twenty-five please advise whether Thursday or Saturday of this week will be suitable for conference at Cincinnati

LAWRENCE C KINGSLAND

Charge Lawrence C. Kingsland
705 Olive Street
St. Louis.

[fol. 319] Mr. Rogers: And as Defendants' Exhibit E-2, Mr. Allen's telegram of March 29, 1937, it being noted that counsel for the plaintiffs agrees that the copies may be used with full force and effect as originals. I may request permission to substitute photostats?

Mr. Allen: That will be satisfactory.

(The said document was marked by the reporter as Defendants' Exhibit E-2.)

Defendants' Exhibit E-2 Offered in Evidence.

[fol. 320] (Defendants' Exhibit E-2.)

Western Union Telegram.

Received at American Trust Bldg., St. Louis, Mo.

AL72 9—Cincinnati Ohio 29 512P

Lawrence C Kingsland

705 Olive St StL

Mr Freeman and I Can See You on Saturday

MARSTON ALLEN

[fol. 321] Mr. Rogers: We presume that Your Honor will take notice of the record in Freeman-Altwater, 8962, now pending on the accounting; however, in order that the record may be more available for ready reference, I should like to note on the record the following statements as admissions against interest made by the plaintiffs in [fol. 322] various parts of the former record. In brief for plaintiffs in the District Court, in Equity No. 8962, the following was said:

"The defendants are in further dilemma, as will be demonstrated if the Court do consider the prior art which is set up, because this art shows that both a movable and a fixed work support in die presses are old, that both dies coming down through the work and dies moving up through the work are old, and that dies which are a part of the work support and dies which are separate from the work support are old."

On page 69 of the same brief, plaintiffs set forth:

"It was new in Freeman's combination of claim 87, for example, to use a cutting tool having one important function, to-wit, being mounted independent of the presser member or hammer element. No other feature as to the die is important in this combination.

Mr. Allen: Well, I object to the pertinence of both of those statements. I do not see what they have got to do with this litigation at all, if they are offered as admissions. [fol. 323] If what counsel wishes to do is refer in his briefs

to statements that I made in various briefs filed in this Court, I think it is satisfactory, but if he proposes to go into reading a lot of admissions against interest, then I think I must present my point as to their pertinence as to this issue. Do you think we could avoid that and you do it in the briefs?

Mr. Rogers: No. I should like—

Mr. Allen: (Interrupting) Then I would like to raise my objection.

Mr. Rogers: For this reason, Your Honor: that when the record is finally assembled, then that can be referred to in a certain page of the record, instead of your Honor having to travel through a lot of old stuff.

The Court: Yes.

Mr. Allen: Then I would like to press my objection to the last statement by counsel as being absolutely impertinent, having no bearing on the present issue at all.

The Court: Overrule the objection.

Mr. Rogers: In the Circuit Court of Appeals record, Freeman against Altvater, Appeal 9602, again the first suit, in brief for appellants, page 5, the following was said:

“The Freeman invention can be regarded as the invention of a new art, or the invention of a machine for performing a new type of work.

[fol. 324] “His patent was taken out as a machine patent and not a method patent, since, after all, the method was strictly the operation of a machine. The new art was forming cutouts in the lined and shaped or closed uppers of shoes, thus cutting out lining and upper at one blow. The machine was one which did this work taking care of the factors which have been noted above.”

Now, Mr. Reporter, the words “forming” through the end of the sentence, ending in the word “blow” were in black type.

(Note: The words referred to as being in black type have been underlined by the reporter.)

Mr. Allen: Object to the statement which counsel has read, unless he also includes the factors which are stated above, so as to make a complete statement.

Mr. Rogers: Now, as I understand it, counsel—

Mr. Allen: (Interrupting) In other words, certainly as admission against interest, it is not proper to pull out two or three sentences out of the page and read those, particularly where they make reference to other matter, without including the entire thing.

Mr. Rogers: Now, as I started to say, if Your Honor please, as I understand it, counsel can read any additional [fol. 325] part he chooses or explain the matter. I have no objection whatever to anything that he cares to say in way of explanation.

The Court: Overrule the objection.

Mr. Rogers: On page 6 of the same brief, I find the following:

“He used”—referring to Freeman—“the former system of the flat bed machines which he had been selling and which did the cutting out of flat work, to provide for giving a hammer blow to the die against the work.”

“He arranged that the die should not move with the hammer or plunger, but should be independent of it, thus permitting adjustment of work and die prior to striking the blow. In this he also followed the former flat bed machines.”

Mr. Allen: Object to the admission as irrelevant to the issues of this case.

The Court: Overrule the objection.

Mr. Rogers: On page 25 of the same brief, the following was said:

“Claim 53 differs from claim 87 in two essential particulars, namely, that it calls for movable-support- [fol. 326] ing means, and also calls for clutch means normally prevented from actuation. It does not [specify] that the movement of the work-supporting

means shall be the operation which releases this clutch."

Mr. Allen: Object again as irrelevant and immaterial.

The Court: Same ruling.

Mr. Rogers: On page 56 of the same brief, the following:

"It should be noted that since the validity of the Freeman Patent is not involved in the present litigation, this Knight Patent does not act to limit Freeman to some particular structure which he evolved over and above Knight, because those features in the Knight Patent which Freeman incidentally employed, to-wit, the sliding work holding member with the die upon it for use with a cutting press, are the same as Knight instead of different from Knight. The principle whereby a reference can be held to limit a subsequent patent is that the subsequent patent must be construed to cover the differences over the reference, not the similarities with the reference."

Mr. Allen: Same objection, Your Honor.

[fol. 327] The Court: Same ruling.

Mr. Rogers: In the case of Premier Machine Company versus Freeman, First Circuit Court of Appeals, Appeal No. 3103, in the brief for appellee, page 22 thereof, the following was said in reference to claim 16, which is a claim somewhat similar in some details to claim 18 of No. 1,681,033, which appears as claim 6.

Mr. Allen: Now, this you are reading as a brief in the Premier case?

Mr. Rogers: Yes. In Reissue No. 20,202. The following appears:

"The term mask is used in the claim, a word which does not answer to any dictionary definition that we have found. However, the meaning in the Freeman Patent is clear from his description of the structure. We surmise that he originated the term because his plate concealed the object on which he was working except for a portion which showed through it."

"The device is a plate secured in connection with the work support and coming down onto the stripper plate, so that it can hold under tension (stretched back to shape), a portion of shoe material. The opening of the mask has an edge portion which at least partially [fol. 328] surrounds that part of the shoe upper material which is to be ornamented. This functions to protect the work from the effect of the head of the press except where the cutting is to be done. It does not mean that the opening defines the hole that is to be cut in the shoe upper material."

"Also, the claim recites that the edge which partially surrounds that portion of the work to be ornamented, is SHAPED for the purpose of acting as a gauge for the work."

Mr. Reporter, the word "shaped" there appears in upper case letters.

I am skipping one paragraph, but I will read it if you want.

Mr. Allen: Let's see what it is. I think you ought to read that, yes, to make it clear.

Mr. Rogers: (Reading)

"The Appellant in its brief pretends that this word SHAPED has no meaning whatever in the claim. It says that any straight bar, clip or clamp, has a shape, and hence can be said to be shaped."

"This contention is actually given a large place in the appellant's brief, in the face of the fact that no [fol. 329] one reading the Freeman patent could [possibility] have any idea but that the words SHAPED to act as a gauge, have the very definite meaning of this edge being given a shape from the point of view of gauging."

"What the patent explains is that the shape given to the edge corresponds to some portion of the upper which is being treated, some line of stitching, some appliqued piece of material, i. e., some lines peculiar to the particular job in hand, and not general to other jobs."

"This is what the word SHAPED means in the claim. We will discuss the legal aspects of this matter later."

"Referring to the desirability of this feature, the record is clear. When a shoe is distorted with part of it back to its original shape, there will always be some portion of the design of the shoe which can be used for gauging with the shaped edge of the mask plate. In many [instance] the necessity of gauging by some means internal of the boundaries of the work piece is paramount. The edges may not only be distorted so that an abutment gauge is impractical but the lining projecting at the edges of the upper may be roughly [fol. 330] trimmed and thus not accurately related to any part of the shoe upper (Ex. 41, Rec. p. 44)."

Now, Your Honor, came this paragraph, which I think is quite interesting:

"The gauging must be very accurate and not approximate only, because a very slight distortion is likely to misplace the ornamentation, and even to cause a cutting through of stitching in the upper. Also, the gauging must be very accurate with relation to the very ornamentations or stitching lines, with reference to which the shaped edge of the mask is adjusted."

Now, if the Court please, I think that that explains—

Mr. Allen: (Interrupting) I just want to note my objection on this score, that the statements of counsel in a brief in another cause between different parties are not admissions against interest on the part of a party.

Mr. Rogers: Now, of course, Your Honor, I don't see that it is necessary to argue this point. The Supreme Court in the case of Mineral Separation against either Hyde or Butte had this same point, and of course there are a number of cases that say admissions in pleadings or statements [fol. 331] or briefs are the most significant kind of admissions against interest.

The Court: Overrule the objection.

Mr. Rogers: What I started to say is that that last para-

graph is of considerable significance in understanding what the Court meant and where the Court arrived at what it said in the Premier case.

(Recess, ten minutes.)

Mr. Rogers: If the Court please, there was one other thing that I wanted to call attention to. On page 4 of the Premier case transcript, in the Bill of Complaint there, the following statement appears:

"Plaintiff further says that the claims at issue in the said suit were either the same or broader than the claims of the patent here in suit,"—

Mr. Allen: Now, if the Court please, that volume is in evidence, isn't it?

Mr. Rogers: May I finish here just a minute?

Mr. Allen: All right.

Mr. Rogers: Continuing that same sentence, the present plaintiff concluded:

"wherefore the plaintiff says that, on the principle of stare decisis, the patent in suit should be held by this [fol. 332] court to be free of anticipation by the prior art, and entitled to a liberal interpretation."

That was the position they took, that the claims in suit in the Premier case were the same or broader—I beg your pardon—the claims in suit of the first Altvater suit were the same or broader than the claims they subjected to trial in the First Circuit Court.

Mr. Allen: If the Court please, I do not know whether I should or should not—or there need to be an objection on my part to testimony relating to the matter of validity of these reissue patents, because it is my contention that the validity is not properly before you. I think the record should show such an objection on my part. I assume that the matters which were read from various briefs, and I feel quite sure that the matter read just lastly from that record, were intended to be used in connection with the contest not as to the construction of the claims involved in this action, but on the broad question of the validity of

the reissues, and it is my objection and my contention that the question of validity is not before this Court in this action. Either there is a contract which we are seeking to enforce or there is [not] contract. If there is no contract [fol. 333] between the parties, then there has been no clearcut showing of any cause why the defendants can attack the validity of our patents, for they have paid us royalties regularly on our patents, there is no way we could have sued. Therefore, it is my contention that an issue of invalidity of patents in a contract suit is not proper. They can show that the patents have been held invalid, but in this instance we have two reissue patents, and those claims have never been before any court except before Judge Brewster, who sustained our No. 20,202 patent, based on a finding on contempt, so that I do not believe that I should let the case go on without entering that objection at this time.

Mr. Rogers: Well, if the Court please, I think this is hardly the time to argue it, but there is also Fuller and Warren from Federal 510 has never been adequately answered by the plaintiff here, namely, that in the event of an extraneous declaration of invalidity of patent, the licensee is entitled to use that extraneous declaration of invalidity, so that he will not be put in any worse position than the general public, and to that extent we are entitled to show the invalidity of these patents and to say the reissues have not altered that fundamental situation.

[fol. 334] Mr. Allen: Well, you see, my understanding of the cases that may have been cited to this Court in various briefs is that the licensee has got a right to set up in a suit for royalties that he has been evicted from his license contract as an accused, and, therefore, that he should be treated as an infringer, not as a licensee because he has been evicted. Now, unless he pleads that he has been evicted, there is no basis for his showing that the patents involved are invalid. To permit a licensee to show that the patents involved in his dealings with the plaintiff are invalid de novo in a proceeding based on the license amounts to nothing else than permitting the licensee to contest the validity of the patents under which he is licensed, and if there is no license between these parties, according to their contention, then there is no basis for

their attack on the validity of our reissues in this cause, being delegated to an action of law.

Mr. Rogers: If the Court please, plaintiff moved to strike parts of the answer which raised these various points, and Your Honor overruled the motion to strike. It would seem to me that that would rather settle that matter.

The Court: Well, we will overrule the objection to this extent: that defendant may offer the testimony that it [fol. 335] has stated that it is going to tender. There is nothing explicit before the Court to rule upon at this time.

Mr. Allen: You are entirely correct.

The Court: The Court is asked to declare its policy in this case, and so we will overrule the objection to the extent stated. I don't care to be put in the position of saying that the Court is going to receive evidence here offered as to the invalidity of these patents.

Mr. Allen: All right.

The Court: It would seem to me, though, that in any event, it would be an issue in this case as to whether or not certain devices come within the claims of the reissue patents.

Mr. Allen: That is correct.

The Court: And that is closely bound up with the question of the invalidity of the patents.

Mr. Allen: Well, sir, I just did not want to let the case go on without stating my position on it.

The Court: All right.

ARTHUR W. ALTVATER,

a witness of lawful age, having been heretofore duly produced, sworn and examined, upon being recalled to the witness stand, testified further, on behalf of the defendant, as follows:

[fol. 336] Direct Examination.

By Mr. Kingsland:

Q. 1. Mr. Altvater, will you give your full name, your residence, and occupation?

A. Arthur W. Altwater; 550 Bedford Avenue, University City; president of Western Supplies Company, 2920 Cass Avenue, St. Louis.

Q. 2. How long have you been engaged in the business of making dies? A. Since the latter part of 1919.

Q. 3. Had you experience in that business before that time?

A. Not with the manufacturing of perforation or cut-out dies.

Q. 4. Now, will you state whether or not you are familiar with a die which I show you, and which I will mark for identification Defendants' Exhibit F? A. I am.

Q. 5. Will you say when you first knew of this die?

A. Sometime in the year 1919.

Q. 6. At what place?

A. Johansen Brothers Shoe Company.

Q. 7. Now, I would like you to demonstrate how that die was used at that date.

A. When I returned from the World War in 1919, Johansen Brothers were using these dies marked K-609 and K-610 for the purpose of perforating and ornamenting what was then known as imitation vamps.

[fol. 337] Q. 8. You are referring now to Exhibit F?

A. Referring to Exhibit F. Johansen Brothers at that time were amongst the better grade shoe manufacturers. And after the vamp was cut, they were marked from a tracing pattern to centralize it, that is, the vamp was marked to show the proper location for the perforation as a center line there, to make it possible to perforate the tips in the proper places. This die was operated two ways. In some cases, the operator would take the adjustable slide, which is known as the elevated clamp gauge it is elevated so that the work will slide under. The operator lines up her work, presses down on the clamp, slides the work down into the proper position, after lining it up properly, and then in a cycle of operation of the machine, the work is cut out or perforated.

Q. 9. You demonstrated with a work piece, which I will ask be marked for identification Defendants' Exhibit F-1.

(The said work piece was marked by the reporter for identification as Defendants' Exhibit F-1.)

A. Now, it was not necessary or they would not at all

times slide the work out or up and down on this sliding attachment, because some material would be slick and they would lose it as it slid in, so they would slide the complete die out and line the work up with the gauge in its proper [fol. 338] position, lining the center line of the vamp with the center line of the die, and the inking lines of the vamp to be perforated with the clamping line on the die.

Q. 10. That is the same as the F-1, the piece that you are working with?

A. The piece is the same as the F-1, the identically same piece.

Mr. Allen: Now then, I understand that these pieces are not original pieces, they are something Mr. Altvater has made for this testimony.

Mr. Kingsland: That is correct.

The Witness: That is right. Then there were times when the shoe manufacturer would make up shoes with sewing on a tip, sewed on, known as a tip, where the other vamp, being in one piece, is known as an imitation vamp.

Q. 11. By the other piece, you mean F-1? A. F-1.

Q. 12. Now, the piece that you are dealing with now I will ask be marked for identification as Defendants' Exhibit F-2, so there will be no confusion.

(The said piece was marked by the reporter for identification as Defendants' Exhibit F-2.)

A. At that time, all shoe manufacturers had one or more what were known as single stroke perforating machines in their factories.

[fol. 339] Q. 13. Now, you are speaking of the year 1919?

A. 1919 and 1920. At that time, they had machines known as single stroke perforators that they could perforate most any style of perforation or design on either the imitation vamps or on the tips, but there were times when they would sew on the tip or cap, as some people call them, onto the vamp, and then these were placed in these same dies by removing the perforation row at the vamp line and just putting in the center medallions by lining them up, the operators would take and fold their vamps to find the center line.

Q. 14. Now, you are referring to the F-2?

A. Referring to the F-2 work piece. Would fold that, and then they would take it and slide it in the die, the same as the other die, line them up with centers and with some edge portion of the die, or on the edge portion of the tip, and the center medallion would be placed in these parts.

Q. 15. That is, the center medallion is the design that is indicated by the openings in this die, Defendants' Exhibit F, in the forward part? A. That is right.

Q. 16. Now, in that instance, the gauge lined up, in order to properly position the part to be cut, lined up with what [fol. 340] portion of the shoe piece?

A. With the edge portion of the tip. That depends upon—it could be lined up with the edge portion of the perforation or with the side line, depending upon how high or how low they wanted to place the medallions into the tip.

Q. 17. Now, was there any other way in which that die was used, that you know of?

A. Yes, there was still another way. They would have these imitation vamps that were perforated in the single stroke machines.

Q. 18. Now, in order to identify it, mark it Defendants' Exhibit F-3, so that when you refer to it, refer to it as F-3.

(The said work piece was marked by the reporter for identification as Defendants' Exhibit F-3.)

A. When they would perforate a vamp like this F-3, it was also first marked on a tracing pattern.

Q. 19. Now, a tracing pattern, in order to exemplify it, I will mark that as F-4.

(The said tracing pattern was marked by the reporter for identification as Defendants' Exhibit F-4.)

A. Marked on a tracing pattern F-4, and after it was marked, it would be placed in this die—no—after it was marked, it would then be perforated and stitched on a single stroke machine, depending upon the style of perforation [fol. 341] tion that they wanted in the vamp, then slid in the same dies.

Q. 20. By the same dies, you mean the "F" die, Defendants' Exhibit F?

A. Exhibit F, for locating and placing in the medallions, either from the stitching or the perforation.

Q. 21. Now, from your own knowledge, you know that that operation was accomplished prior to 1920, do you?

A. As far as my own knowledge, this operation was performed back in 1919, because I remember well, I just came back from the World War, they had the first Knight machine that I had ever seen operated in this particular territory, in fact, the first one I had ever seen operated, that was really the beginning of our perforation dies sold by the Manufacturers Supplies Company where I was employed at that time.

Q. 22. Now, prior to the time of the World War, you had had selling experience with dies and machines of this type?

A. Very little selling experience with dies before the World War. I had seen the dies in operation in the factories on a different machine, but not on this particular machine.

Q. 23. Well, what had been your contact with shoe factories prior to the war?

A. Oh, I have been around all the large factories prior [fol. 342] to the war about four or five years.

Q. 24. And that was while you were working with—

A. (Interrupting) Manufacturers Supplies.

Mr. Kingsland: Manufacturers Supplies Company. Now, I would like to introduce in evidence the die, Defendants' Exhibit F, and also, merely as illustrative, the work pieces and the—what do you call that?

The Witness: Fiber tracing paper.

Mr. Kingsland: And the fiber tracing paper, marked respectively from F-1 to F-4, inclusive, the die being F.

Mr. Allen: Will the die be further identified?

Mr. Kingsland: It will be further identified.

Mr. Allen: I see. With the understanding that the die will be further identified, no objection is made to the die. Otherwise, the matter is the recollection of this witness, and I think I should note, just to make my record complete, my formal objection that this testimony, so far as it is pertinent to the question of construction which should be put on my patent, I have no objection to it. So far as it goes to the question of validity of our patent, I think

that is not in issue, and I will accept the Court's ruling that he gave on that subject.

Mr. Kingsland: Well, of course [is] the evidence is submitted in support of any issue that may remain in the case. [fol. 343] It is primarily prior art, and I shall show that this is one of the dies that was pleaded as prior art, and I will couple it up with definite records. If you prefer, I will hold it, hold the offer.

Mr. Allen: It makes no difference. Go ahead and offer it.

Mr. Kingsland: In any event, I might say that it is not a pure case of recollection, because we have the physical structure. Probably Mr. Allen may have in mind some of those structures identified by pure recollection, some question as to whether or not it is permissible, if, before you have the structure, the witness is in position to identify it.

Q. 25. I show you a die which I mark Defendants' Exhibit G for identification, and ask you if recognize that.

A. I do.

Q. 26. And how early were you acquainted with that type of die? A. Back in the early part of 1922.

Q. 27. And where was that used?

A. At Johansen Brothers.

Q. 28. Now, with this die, Defendants' Exhibit G, will you explain, by reference to work pieces, how that was operated?

A. This Exhibit G was operated on the same order. It was for what we called a wing tip. The vamps would be cut and marked, using fiber patterns.

[fol. 344] Mr. Kingsland: Which I mark for identification G-1.

A. (Continuing) Known as Exhibit G-1, which are called either fiber marking patterns or fiber tracing patterns. In this particular case, the vamp line perforation is missing, but the medallion is here on the die. This has his slide underneath the elevated or clamp gauge lined up to the stitch line, in order to locate the center medallion. Now, this was also handled on dies.

Q. 29. Are you demonstrating with the piece which I marked G-2?

A. Now, there were some tips—it can be made to slide—at one time it was lifted down in its proper place.

Q. 30. You are working with work piece G-3?

A. Exhibit G-3 is a vamp with a wing tip on, sewed on it, without any perforation. There are times when the manufacturer would put a medallion only in his shoes without any vamp perforations, then the die would be used as I am demonstrating here, by lining it up with the gauge of the wing tip of the edge of the wing tip, in order to locate the medallion in its proper place.

Q. 31. Now, was there any further work that was done on that, that you know of, prior to 1922?

A. All the work was done practically on the same order. Either they were marked first or stitched first. Some had [fol. 345] tips on them and some without tips. I think I might say that these dies were made, were built with pull pins and stops. The dies would slide in and out of the machine and were connected with a pedal so you could slide the whole die in and out of the machine. In fact, the whole machine was built on an angle, so that the die would slide in by itself, and the operator would pull the die out by stepping on a treadle that was connected with a piece of round belting or something to pull the dies out at each operation.

Q. 32. Now I show you Plaintiffs' Exhibit No. 34 that has ink marking on it. From your knowledge of the matter, would those ink markings be put on by a pattern of the general type of F-4 that you have referred to here?

A. Well, in the old days—

Q. 33. (Interrupting) Or G-1?

A. In the old days, they were all put in with tracing powder. They might provide a work marking machine that was used, known as a work marking or tracing machine for putting the work markings on.

Q. 34. Now, how does the method of gauging this Exhibit No. 34 in its die, such as was demonstrated yesterday, compare with the method of gauging on the two dies that you have referred to here?

A. Well, if you will let me have the upper, I will demonstrate it.

[fol. 346] Q. 35. Well, you can demonstrate it, but then state how it compares.

A. All right. In this die, it is placed—

Q. 36. (Interrupting) Now, in this die, you are meaning Plaintiffs' Exhibit No. 1?

A. In Plaintiffs' Exhibit No. 1, it is put in the die and located to the ink marks, and then clamped down to hold the shoe in its place while it is in the cycle of operation. Taking the same die, the same upper, to put it in—

Mr. Allen: (Interrupting) Lay it on top.

The Witness: All right. To put it in this die here, it would be the same way, that it would line up, in fact, almost to this tip square, in fact, we could put this center medallion, using almost this identical gauge in this shoe, and lining it up from the edge of the tip, or either the perforation or the stitch line.

Q. 37. You are speaking of Exhibit No. 34. Now, Exhibit F, does it have a clamping action when the die is presented in a cutting position?

A. Well, to my knowledge, these long slots in here form a sort of a hinge. This slide is on a hinge that when you hold the work down, you naturally clamp the work in place while it goes into the cutting action. The work is held or clamped down the same as—you would call it a [fol. 347] clamp gauge, I suppose.

Mr. Allen: Don't lead the witness.

Q. 38. Well now, with this wing tip die, Defendants' Exhibit G, I note that the upper plate is somewhat spaced from the plate below. Is it intended, as you understand that construction, that that shall be a clamp or shall be a gauge construction?

A. As this is constructed, it probably represents an elevated gauge.

Q. 39. Not a clamp? **A.** Not a clamp.

Q. 40. And in that regard, how does that compare with the Plaintiffs' Exhibit No. 2?

A. Naturally, practically the same way. You have to hold the work with your fingers separate from the clamp, because if you clamped down on this or had your hand under it, it would have to be directly under the pressure member of the machine. There is no possible way that you could hold that clamp down in the cycle of operation without injury.

Q. 41. You know the construction and the operation of this Plaintiffs' Exhibit No. 2? A. I do.

Q. 42. And in that, state whether or not the top plate has a clamping function?

A. It does not have a clamping function.

[fol. 348] Q. 43. Now, Mr. Altvater, you were in court when the correspondence was read with respect to arranging a conference sometime after the latter part of March, of 1937, and that was after the letter in respect to the reissues. Will you tell us whether or not a conference was held in Cincinnati in respect to this general situation?

A. Well, as I recall that, I received a notice from Freeman, and with the copy of the reissue patents, and I sent them to the office of Lawrence Kingsland, who was out of town at the time, and immediately on his return we got together, and he advised me that we were under a court injunction, the court had advised us what we had to do, and there was nothing we could do but probably arrange a trip with Freeman and see what we could find out, because we did not think the patents were valid. So I left it up to Mr. Kingsland to make arrangements to visit or to come in contact with Mr. Allen and Mr. Freeman. We thought probably Mr. Freeman might come to St. Louis, but he wrote that he could not get to St. Louis, but if we wanted to come over to Cincinnati, that he would listen to us. So we arranged a trip to Cincinnati, with the idea of trying to straighten this thing out, to find out what the patent situation was, because we did not think the patents were valid, and we tried to get some kind of a [fol. 349] ruling or an agreement that we could continue to work on, and to be truthful with you, we did not get anywheres; in fact, Allen almost refused to talk to us about it.

Q. 44. Do you remember what was said in the presence of Mr. Freeman, what was said with respect to your position regarding the reissue patents? I asked if you remembered what was said in that regard.

A. I don't know exactly what was said as to the reissues. We just said that we thought they were invalid, but Freeman did not want to listen to us. That is all I could really remember.

Q. 45. Well, the point was—

Mr. Allen: (Interrupting) Don't lead him.

Q. 46. The statement was made in your presence and Mr. Freeman's presence that we considered the reissues invalid? A. Positively.

Q. 47. At that conference?

A. We considered them invalid.

Q. 48. Now, Mr. Altvater, I show you a letter which has been introduced in evidence, from Mr. Freeman to the Western Supplies Company, under date of February 13, 1932, and is identified in evidence as Plaintiffs' Exhibit 29-G. That letter contains the statement that:

[fol. 350] "We note reference in your letter of February 1 that you are not reporting dies similar to those sent to Allen & Allen.

"The old die that you sent them is entirely different from the dies that you are now making which embody important features in die making which we developed."

The die that you sent to Mr. Allen referred to there was what die?

A. I think it was that one and this one, Exhibit—

Q. 49. (Interrupting) F and G?

A. F, and G. In fact, there were several more, I think Mr. Allen lost one for us that we never did get back.

Mr. Allen: Well, I do not remember that, but I do remember that those two dies were ones that were sent down, and we have discussed those dies.

Mr. Kingsland: Well, that is the point.

Mr. Allen: I won't agree that I lost any die.

Q. 50. Now, in this letter, it further says:

"It appears to us that all controversy can be avoided if you will make dies on the order of what you call the old die with sheath gauge, and not make, for territories in which you are not licensed, the dies having masks as you are now doing, and report these

[fol. 351] dies when made for the St. Louis Territory."

Now, these dies F and G were the dies that were referred to in that letter, as you understand it? A. Yes, sir.

Q. 51. And were those dies then later returned to you, after this effort of settlement?

A. Yes, sir. That was in 1932.

Mr. Allen: That is earlier.

Mr. Kingsland: That is correct.

The Witness: That was not later. That was when Freeman said it was okay to go ahead with the manufacture of these type of gauges.

Q. 52. Well, from a practical standpoint, state whether or not the dies F and G correspond with dies, Plaintiffs' Exhibits Nos. 1 and 2?

A. I really cannot see any difference, from a mechanical standpoint and from a practical standpoint.

Mr. Kingsland: You may inquire, Mr. Allen.

Cross Examination.

By Mr. Allen:

XQ. 1. You have got a patent on one of those, Mr. Altvater, haven't you, issued to you?

A. Not on the gauge itself.

XQ. 2. Oh, you were just talking about the gauge in [fol. 352] your testimony? A. In my testimony.

Mr. Allen: Oh. Now, let's look at the dies. It is 12:30. Shall we go ahead?

The Court: We might as well stop here, Mr. Allen.

At this point, a recess was had until 2:00 o'clock P. M.

After recess, at 2:00 o'clock P. M., on February 7, 1940, the following proceedings were had:

The Court: You may proceed.

Mr. Allen: Mr. Reporter, will you please read the last question and answer in Mr. Altvater's direct examination?

(The last question and answer of the direct examination was thereupon read by the reporter.)

XQ. 3. Do you recall making that statement, Mr. Altvater? A. I do.

XQ. 4. Now, let us take Defendants' Exhibit F and Plaintiffs' Exhibit No. 1. See if I am correct in this: In Defendants' Exhibit F, the overlying plate is entirely behind the zone of cutting action, isn't it? A. It is.

XQ. 5. And in Plaintiffs' Exhibit No. 1, a part of the [fol. 353] plate lies in front of the zone of cutting action, and part of it, particularly the two horns that I am pointing to in the center, extends back and around the other side of the portions which are going to be punched, does it not? A. They do.

XQ. 6. Now, that is the difference, is it not, from the defendants'?

A. They look alike. We made those with different designs.

XQ. 7. Now, Mr. Altvater—

A. (Interrupting) In this case, it has a different design, yes, sir.

XQ. 8. It is different? A. It has a different design.

XQ. 9. Now, we will see if we can analyze the structures. You say that each of them has a rigid ornamenting die? A. Yes.

XQ. 10. In connection with it? A. Yes, sir.

XQ. 11. Each of them has a stripper device?

A. Yes, sir.

XQ. 12. On it, in the form of a plate that moves up and down? A. Yes, sir.

XQ. 13. And the cutting elements project through in each instance, through holes in this plate, is that right?

A. That is right.

XQ. 14. And the work is supported on that plate?

A. Yes, sir.

[fol. 354] XQ. 15. When it is being cut. And you say that each of them has a gauge device, do you? A. Yes, sir.

XQ. 16. The top piece of Exhibit F and the plate that I have called a mask plate in Exhibit No. 1? A. Yes, sir.

XQ. 17. And you say that in each instance these overlying plates are to gauge the work, do you? A. Yes, sir.

XQ. 18. Now, the plate in Exhibit F is mounted on the stripper, is that right? A. Hinged on the stripper.

XQ. 19. In Exhibit F, it is mounted on the stripper?

A. No, it is hinged on the stripper.

XQ. 20. Well, if it is hinged on the stripper, it is mounted on the stripper? A. Well, all right then, it is mounted.

XQ. 21. And the same is true in Exhibit No. 1, is it, this plate is supported on projections of this stripper?

A. That is right.

XQ. 22. Now then, you demonstrated the operation in Exhibit F just at the time that the work was being cut. Do that again, will you? You don't need to put a piece of work in it to gauge it.

A. The clamp is put down to hold the work in position. [fol. 355] XQ. 23. All right. Your designs are located on the block on the right-hand side about an inch behind the front edge of the plate and on the left-hand side about the same distance. A. Yes. It doesn't make any difference.

XQ. 24. I mean that is the way you are doing it.

A. That is the way I am holding this.

XQ. 25. That is the way the operator would hold it?

A. That might be. She has a hundred ways to hold it, that she can hold it.

XQ. 26. I notice you have got your fingers forward of that indented line that seems to be running across, that line.

A. Well, I happen to have one finger forward and I happen to have one finger back of it.

XQ. 27. Well, your advanced fingers are ahead of that line, are they not?

A. Yes, I can put my whole hand in front of it.

XQ. 28. All right. A. Or back of it.

XQ. 29. All right. A. Or any place on there.

XQ. 30. All right. If you put it in back of it, it is an inch; if you put it up toward the front of the plate, that is longer, isn't it? A. That is right.

XQ. 31. So that the way you have operated, have indicated that this plate was operated, you have pressed the [fol. 356] front edge of the plate down against the work?

A. That is right.

XQ. 32. So the device, as you say, is mounted on these slit sides on the stripper plate, and that serves as a means whereby you can clamp this against the—

A. (Interrupting) That is right.

XQ. 33. Plate against the work? A. That is right.

XQ. 34. And it pushes the work down against the upper side of this work support? A. That is right.

XQ. 35. Does that in each of these?

A. Yes, holds the work down.

XQ. 36. In this one, you pull the whole entire plate down by means of a handle located in the back? A. That is right.

XQ. 37. Now then, Mr. Altvater, isn't it true that in the year 1931 you filed an application for letters patent?

A. Yes.

XQ. 38. Serial No. 539,153? A. That is right.

XQ. 39. And isn't it true that in that patent you showed and illustrated the construction of die in general that is shown in Exhibit No. 1? A. That is right.

XQ. 40. Now, you knew about the device of Exhibit F [fol. 357] in 1931, did you not? A. I did.

XQ. 41. And as you claimed the following to be invention, I will read you claim 1 of your patent.

Mr. Kingsland: If the Court please, it is objectionable to refer to the fact that the patent was issued on this structure, because there are a number of decisions that say that it is immaterial whether one apply for a structure. That does not estop him with respect to argument, with respect to the scope of a patent that may be sued on. Moreover, under the decisions in this Circuit, the Courts have now held that the question of whether or not a device that is accused is patented is not material. It is either on the question of infringement or on the question of validity.

Mr. Allen: I am endeavoring to—

The Court: (Interrupting) Overrule the objection.

XQ. 42. Yes. I want to read you this claim now, Mr. Altvater. I want you to think back over the questions that I have just been asking you. It says in the patent granted to you:

"A machine of the character described comprising rigid ornamenting dies. A removable support having holes there through for projection of said dies when [fol. 358] said support is moved. A gauge device supported by said support for gauging and locating the work properly with respect to said dies, and means for operating said gauge device to position against the upper side of the work that is mounted on said support."

Mr. Rogers: If the Court please, I think that Mr. Allen should read the whole specification, so that we can know what that particular wording of those claims meant.

Mr. Allen: I now propose to introduce this patent, if necessary. At this juncture, I just ask the witness if I have not correctly read the claim to him from his patent.

The Witness: I think you did.

XQ. 43. And I want to ask you if, according to your answers you have just given me, that claim does not apply, according to your opinion, to Exhibit F, just as well as it does to Exhibit 1? A. No.

XQ. 44. It does not? A. It does not.

XQ. 45. In what respect is there difference?

A. Why, entire difference. This has a clamping means back here with your hand. You cannot clamp it down with [fol. 359] your hand. You cannot hold that gauge down there with one hand like this (demonstrating) and hold your work or adjust the work.

XQ. 46. The claim says nothing about some device extending to the rear or anything of that kind?

A. But it says there the device for holding it down.

XQ. 47. It says means for operating a gauge for—

A. (Interrupting) Isn't this a means for holding the gauge?

XQ. 48. Yes. And I think you said in your testimony that the top plate of the Exhibit F was hinged to the stripper. Isn't that a means?

A. I don't know. I am no patent attorney.

XQ. 49. I see. You still take the position that the device of Exhibit A (evidently meaning Exhibit No. 1) mechanically and in all principles is the same as Exhibit F?

A. I only went by what I knew from prior art. Freeman knew that these dies existed.

Mr. Allen: Mr. Altvater, just a minute. Just read the question.

(The question was repeated by the reporter.)

A. As far as the gauging is concerned, but the method of clamping it down is different.

XQ. 50. Now, Mr. Altvater, will you [please] the die, Exhibit F, and step over here to the Knight tip press

[fol. 360] and show us how you would operate it on that press? A. Do you want me to take some work with me?

XQ. 51. Take one of those pieces of work, yes.

(The witness demonstrates on a machine.)

A. The die is connected to a treadle; the operator will bring her die out so that she could see what she was doing; line to cut in the die, bring it down, centralize it, slide it in the machine, and hold it myself in place along this line.

XQ. 52. All right. Now, your fingers, Mr. Altvater, you placed on that plate where you did when you were demonstrating before today.

A. I said the girl could place them any place on the die.

XQ. 53. Just a minute. You placed your fingers where you illustrated before. Just about, lying about an inch ahead of the plate, and when you shove that work forward, that could only hit the press, am I correct?

A. There is [not] stop on here. It is not complete. The stop is missing on the die.

XQ. 54. All right, but that is exactly what I have stated, is it not? A. Well, you will have to state it all over again.

XQ. 55. In your demonstration just now, you placed your hands on that die, and when you permitted the die to [fol. 361] go forward under the press, as in the position to stamp, your fingers were under the press head, isn't that correct? A. Which, here (indicating)?

XQ. 56. Yes.

A. Why, sure. I will put them back up again if I am not careful. They are under now.

XQ. 57. Yes. A. For there is a gauge goes on—

XQ. 58. (Interrupting) Now, you notice that indented line? A. Yes, I notice it.

XQ. 59. Now, that is where the press head came, isn't it, from the operation of that die? A. Not necessarily.

XQ. 60. Over many years? A. Not necessarily.

XQ. 61. Do you deny that that line that goes across the die is not a line where the press, in many repeated operations, has made a little indentation in that plate?

A. I don't deny that. That die has been in use for years.

XQ. 62. All right. Now, your fingers were in advance of that line, weren't they? Let's return, Mr. Altvater, to the stand.

(The witness returns to the witness stand.)

Now, Mr. Altvater, I want to call your attention on this die: I notice in the top plate that we have here a series of dimple marks toward the back of it. Now, is it not true [fol. 362] that those were provided for the operator, in order to hold the work clear back behind?

A. Well, when I demonstrated—

XQ. 63. (Interrupting) Is not that what those holes are for? A. No, that is not what those holes are for.

XQ. 64. What are they for?

A. They were for, when the operator put her work in in the back position, which she sometimes does, then they would hold the work so that they would slide and not lose its location as it went in, like that is doing right now (indicating).

XQ. 65. That is right. She would hold it back here.

A. She would hold some of them back here also, yes, sir. That was handled both ways.

XQ. 66. So those little dimples back here that project out from the top of this plate were to grip the work and hold it, because they were rough things that could penetrate that work? A. Yes.

XQ. 67. I want to ask you if you are not willing to admit that that is where operators would hold these plates in operation?

A. No. Operators would do it where it was best suited for themselves to earn a living. Operators were paid piece—

XQ. 68. (Interrupting) All right.

A. (Continuing) —prices to do that job.

XQ. 69. I am talking about the years 1919 and 1920. [fol. 363] Where would the operator hold her hand?

A. Any place.

XQ. 70. Now, Mr. Altvater, you introduced as Exhibit F-1 a vamp on which are some lines sketched. Now, what were those lines placed there for?

A. To locate the design to be perforated.

XQ. 71. Were they put there as stitch lines?

A. Oh, they were put there for marking lines.

XQ. 72. I see. Not for any subsequent thing to be stitched on the work, were they?

A. Yes. To be perforated. If they are done on the back side, they would be perforated; on the front, they would be marked.

XQ. 73. In this particular Exhibit F-1, the lines that were drawn on the back you say were merely gauging lines? A. That is right.

XQ. 74. The reason why is that when you stitch the work you stitch it from the— A. (Interrupting) Top side.

XQ. 75. Top side, and you could not see the line. Now, in Exhibit G, Mr. Altvater, I think you said that that normally stood still, that gauge, it did not slide back and forth. A. Normally, it stood still.

XQ. 76. You find three dimples in the back end of that plate. Would you say, would you agree with me that those [fol. 364] were placed there so that the operator would get a grip on the work, if she pressed down on it in the fashion I am now doing with my fingers at the back end of the plate?

A. They were put there to help hold the work tight.

XQ. 77. Mr. Altvater, this die is equipped underneath the plate, that is the type which you referred to as a gauge plate, with some bright blue washers or shims.

XQ. 78. Have those newly been placed on that?

A. Oh, I wouldn't know; that die has been handled so many times.

XQ. 79. You would not know?

A. I just put a new one in there, but that is just exactly the way the die was when it was sent to you at Cincinnati.

XQ. 80. It had those bright blue shims in it?

A. Positively.

XQ. 81. Now, the looseness of this back plate has not got anything to do, has it? A. Nothing at all.

XQ. 82. Just because it is old, it is loose? A. That is it.

XQ. 83. Have you any way of telling whether this die, Exhibit F, is in the condition in which it was received [fol. 365] from the manufacturer, that is, except for being out of repair?

A. I think it is exactly in that order. That probably was cut there or something to fit in another portion or something.

XQ. 84. What I mean to say is—

A. (Interrupting) That is the type of construction.

XQ. 85. All right. What I am trying to get at is, a slide mounted on a plate which had the side branches of it slit?

A. Yes, they made both, they made them rigid and sliding.

XQ. 86. All right. Now, are you in a position to say that this slide which we have in Exhibit F was, when you saw it in 1919, on a plate which had the side edges of the stripper slit, or on a plate in which the side edges of the stripper were not slit? A. I am positive they were slit.

XQ. 87. You can remember that from 1919?

A. Positively.

XQ. 88. They had them all kinds of ways, did they?

A. No, I did not—they had these mounted on there without the sliding mechanism, but they slid, all those type of plates.

Mr. Allen: Just one minute, please. Mr. Kingsland, would you agree that claim 1 in patent No. 1,885,169 was an original claim as placed in this application, I mean, [fol. 366] I am not asking you to agree it is pertinent, but would you agree to that as a fact?

Mr. Kingsland: I don't know whether that is or not.

(Mr. Kingsland examines a document.)

Well, from what you have shown me representing this as an abstract, that would be my interpretation of the abstract.

Mr. Allen: If that should be made to appear to be incorrect, why that will be something else again, we will amend the record.

Mr. Kingsland: Of course, subject to my objections.

Mr. Allen: Yes. All right. That closes the cross examination. May the record show that the patent I was referring to was No. 1,885,169?

Mr. Kingsland: Are you putting the patent in?

Mr. Allen: No, not during my cross examination.

Mr. Kingsland: You are identifying it?

Mr. Allen: Yes.

Mr. Kingsland: Are you through, Mr. Allen?

Mr. Allen: Yes.

Redirect Examination.

By Mr. Kingsland:

RDQ. 1. Mr. Altvater, you were asked to demonstrate on this Knight machine over here in the room. Was that a [fol. 367] machine that you brought into court at the plaintiffs' request?

A. That was also in the request when I brought it in.

RDQ. 2. Yes, and will you step over here a minute? I want to call your attention in that that this pressure plate extends beyond the frame. Will you state whether or not that has been added, or whether it was a part of the standard machine?

A. That was added. That is not part of the standard machine.

RDQ. 3. And it was not—state whether or not it was a part of the machine that was used at the Johansen Brothers, about 1919.

A. The striking plate of the machine is smaller. This striking plate was done for a special demonstration in our shop that had nothing to do with this hearing, but on the last minute, when they asked for a machine, this is the only one that was available.

RDQ. 4. Now, with the striking plate back to the standard style, would there be available space at the front so that the hands of the operator could press down the plate, so that during the cutting out operation the plate would act as a clamp for the work? A. It would.

RDQ. 5. Now, you mentioned in connection with the die [fol. 368] that there was a stop missing on the die. What effect did that have, with respect to placing the die when the machine was in cutting out position, so that the operator could press down the plate and act as a gauge?

A. Well, the die would always stop at the same place, which would give the operator a chance to hold her fingers, to keep them from getting underneath that machine when holding down the work close to the front there.

RDQ. 6. Was the operation that counsel for the plaintiffs insisted on your performing on this machine the normal standard operation that was performed on that machine in 1919 and thereafter?

A. The operation was the operation that was performed,

but not exactly in the same way, due to the fact that complete parts were not there.

Mr. Kingsland: That is all.

The Court: Is that all of the witness?

Mr. Kingsland: That is all.

Mr. Allen: Just a moment. I would like to see where the stop would go on this die, from Mr. Altwater.

Recross Examination.

By Mr. Allen:

RXQ. 1. You said the die did not have a stop on it. I [fol. 369] wanted to find out on there where that stop would be located.

A. The stop would be located by this hole (indicating).

Mr. Allen: The witness has pointed to a [hold] toward the rear of the die, which is a threaded hole and extends down, so that you can see a screw projecting in from the back end.

RXQ. 2. Now, where would that stop engage?

A. Right here (indicating).

RXQ. 3. It would engage with the inner end of a slot in the press bed, so that we can, by removing the plate that has been added, you say, to the presser of the machine, and inserting a screw in the base, find out whether the operator can put her hands on this gauge, is that right?

A. Yes, you can.

RXQ. 4. All right. In your last answer to Mr. Kingsland to a long question, when he referred to again the operator clamp, did you include among the places where she could put her fingers to a clamp on the back edge of this plate?

A. No, I did not say that. That they could be any thickness, any place, which would clamp the whole plate down.

RXQ. 5. If you touch it any place, you could clamp the whole plate down?

[fol. 370] (The witness returns to the witness stand.)

RXQ. 6. The plate could be of such thickness, but it is not of such thickness, is it?

A. This individual one is not, but some were.

Mr. Kingsland: Is that all?

Re-Redirect Examination.

By Mr. Kingsland:

RRDQ. 1. Well, with this particular die, Mr. Altvater, is it your testimony that after that die was properly aligned for the cutting out action in a standard machine, that there was still available space for the operator to hold the work down in clamped position during that cutting [our] operation? A. There is.

Mr. Kingsland: That is all. There is one other point here, Mr. Altvater, that I wish you would examine this machine for.

The Court: Wait until the witness gets over there before you ask the question.

Mr. Kingsland: Yes. I am sorry I was too forehanded before.

(The witness goes to the Knight press.)

RRDQ. 2. The slot that was referred to, the piece in which was the stop, I will ask you to examine this par-[fol. 371] ticular physical structure and see whether or not that slot has been lengthened or not?

A. Well, I could not say exactly whether that slot has been lengthened or not. It might have been lengthened, because I cannot see why it should go back that far. I saw machines where it was just about a half inch or an inch from the front end.

RRDQ. 3. That is to say, the slot, instead of being—I will ask you to measure the slot that is in this physical exhibit, and just give approximately the depth of that slot.

A. (After measuring) One and seven-eighths inch.

RRDQ. 4. And what was the depth of the slot on the standard machines, if you know? A. About one inch.

Mr. Kingsland: That is all.

OLAF G. BEESTRUM,

a witness of lawful age, being duly produced, sworn and examined, testified on behalf of the defendants as follows:

Direct Examination.

By Mr. Kingsland:

Q. 1. Will you state your full name, your residence, and your present occupation?

A. Olaf G. Beestrum, 2439 Hartland Avenue. I am now [fol. 372] employed by the Samuels Shoe Company as shoe designer.

Q. 2. Now, will you tell me, Mr. Beestrum, how long you have been in that business of manufacturing shoes?

A. I started in the shoe factory as a boy in 1907, and I was with the Johansen Brothers until about eight or nine years ago.

Q. 3. Until about eight or nine years ago? A. Yes, sir.

Q. 4. Well then you were with them in the period from 1917, we will say, until 1923? A. Yes, sir.

Q. 5. You were there in that period? A. Yes, sir.

Q. 6. Now, I will show you a die that has been marked Exhibit F, and will ask you whether or not you recognize that construction? A. Yes, sir, I do.

Q. 7. Now, when was it that you first knew of that construction?

A. Just exactly the correct date, I cannot tell you, but I can tell you this: that in—before, some few years before 1917 and on up to about 1922, I was employed at Johansen Brothers Shoe Company as a—what is known as, in the cutting room, as the back shoe cutter, cutting single pairs and special single pairs, and in this capacity in cutting back shoes, that made me familiar with this particular die [fol. 373] you are talking about, because in some cases when I cut this back work it seemed necessary that I would have to go to this machine and stick a single pair in here and die it out; if the operator did not happen to be there, why I would do that myself.

Q. 8. Now, will you just explain to us what you mean by back work in a shoe factory?

A. Well, back work in a shoe factory is, many times uppers are spoiled in being lasted, they are spoiled in the

lasting room, and they are sent back, this upper is sent back and cut over in the cutting room.

Q. 9. That is, parts of them are cut over?

A. Parts of them are cut over, parts that are damaged.

Q. 10. Now, you were in that occupation from 1917 to 1922? A. Yes.

Q. 11. That is, doing the back work there?

A. That is right.

Q. 12. Well, was it during that period that you became acquainted with the die such as Exhibit F? A. Yes, sir.

Q. 13. And can you say now as to whether it was the earlier part of that period or the later part of that period?

A. Well, it would be more to the latter part of the period. In other words, it would not be before 1917, because—

Q. 14. (Interrupting) No, I am not—when I said the [fol. 374] period, I understood you to say that you were doing this back work from 1917 to 1922. Now, I wanted to know whether it was nearer 1917 or nearer 1922 that you first became familiar with this particular die.

A. Was nearer 1922.

Q. 15. Now, in the operation of that die, were you in the court this morning when Mr. Altvater demonstrated the several ways in which that die was used to gauge and clamp the work? A. Yes, sir.

Q. 16. You noticed that he had the three different pieces, and showed as to each how each piece was gauged and how it was clamped, did you follow that this morning?

A. With three pieces—stitching and perforation.

Q. 17. Stitching and perforation. A. Yes, sir.

Q. 18. And ink marks? A. That is right.

Q. 19. Now, were those three gauges or those three types of work actually done by you within that period from 1917 to 1922 on this die? A. Yes, sir.

Q. 20. Now, in doing that work, when you performed it on the machine that it was used with, state whether or not the operator, when the die was in cutting position, whether the operator pressed the plate down into clamping engagement with the work?

[fol. 375] A. As I recall, it was necessary to press the plate down.

Q. 21. And am I correct in understanding that you actually, yourself, performed those operations? A. Yes, sir.

(Here ensued a colloquy between counsel, off the record.)

Q. 22. Counsel for plaintiffs has asked that we give a demonstration as to how we did it. Now, let's take this work piece—

Mr. Allen: (Interrupting) Which one are you going to punch? One of them is already punched. That is F-1, isn't it? Let's look and see.

Q. 23. Well, let's take the perforated vamp, one that was referred to, and just illustrate how it was put in that die and how the work was done.

A. (Demonstrating) Put in here and gauged by that perforation and straight line.

Mr. Allen: (Q.) Then how would it be held?

Q. 24. Then how would the plate be held?

A. Right there (indicating).

Mr. Allen: Right there. Mr. Beestrum is placing his fingers over where the little row of dimples is at the back end of the plate.

Q. 25. Now, Mr. Beestrum, I would like you to look at [fol. 376] this die that has been marked Defendants' Exhibit G, and tell me whether you recognize that construction? A. Yes, sir.

Q. 26. What type die is that or was that called, I mean, what is the decoration?

A. Well, we called this at that time as a tip punch or a medallion punch die, that is what we termed it in the factory.

Q. 27. Well, the term "wing tip" has been used. Does that signify anything with respect to that die?

A. This wing tip here could be any kind of a gauge on there and use this same part here (indicating).

Q. 28. Now, tell me, will you, at what time you knew of the die such as this Exhibit G?

A. That die is the same type as the other die. They were about the same, medallion.

Q. 29. You heard the testimony this morning with respect to how that particular die was used, that is, it was used with perforations sewed on tips, and again ink marked. State whether or not it is your recollection that it was so used. A. It was so used.

Q. 30. And was that die of this type operated by you prior to 1922?

A. Don't misunderstand. It was not exclusively operated by me. Only pieces.

[fol. 377] Q. 31. No, I understand that. A. Yes.

Q. 32. But you did operate it? A. I did.

Q. 33. Within that period? A. Yes.

Q. 34. And you operated it as a part of your duties on this back work in the manufacturing of shoes?

A. As a part of cutting it out, and sometimes—I will state the reason why I did that. Sometimes the operator was not there. Well, I just marked these orders and put them in the machine, to get quick action.

Q. 35. But it was part of your function to do that?

A. Part of it.

Mr. Kingsland: You may inquire, Mr. Allen.

Cross Examination.

By Mr. Allen:

XQ. 1. Do you have any drawings or blueprints in connection with those dies, Exhibits F or G, at your factory, that you have with you? A. I do not have any with me.

XQ. 2. Do you know of any?

A. I do not know of any, no.

XQ. 3. You have not seen any drawings or blueprints of any of these dies, Exhibits F or G? A. No.

XQ. 4. So far as concerns the slits along the side of the stripper plate in Exhibit F, is it your recollection [fol. 378] that the die that you operated back in those years had these slits, when you had the sliding element on it, or were the slits in the dies usually only where you had a fixed member?

A. My recollection is die just as that is on there.

XQ. 5. That is what you remember? A. Yes, sir.

XQ. 6. Just like that, with these slit sides?

A. That is it, yes.

Mr. Kingsland: Is that all?

Mr. Allen: Yes.

Mr. Kingsland: All right. Step down.

NORMAN L. BROCK,

a witness of lawful age, being duly produced, sworn and examined, testified on behalf of the defendants as follows:

Direct Examination.

By Mr. Kingsland:

Q. 1. Will you state your full name, and your residence, and your present occupation?

A. Norman L. Brock; 479 Summer Street, East Bridge-water, Massachusetts; vice-president of Brockton Perforating Machine Company, Brockton, Massachusetts.

Q. 2. Will you state whether or not you were ever em-[fol. 379] ployed by the George Knight Company?

A. I was.

Q. 3. And during what period?

A. Between the years of 1909 and 1922.

Q. 4. Did you leave there at 1922?

A. I left the George Knight Company during the month of May, of 1922.

Q. 5. Will you tell me what, generally, your duties were while you were with the George Knight Company, I mean just broadly?

A. Well, I was bookkeeper, shipper, salesman, rent collector, anything that they wanted me to do, including sweeping the factory.

Q. 6. Well, you were familiar, entirely familiar, during that time with their business? **A.** Very much so.

Q. 7. And you did, to some extent, keep their records?

A. I kept all of the records during that time.

Q. 8. Well now, I show you six photostatic sheets purporting to be records which, under a stipulation with the plaintiffs—these sheets, Your Honor, may be used with the same force and effect as the originals. That was to avoid taking depositions in Boston, and Mr. Allen has agreed that when this matter came up, that I could make that statement to the Court, and he would agree to it.

[fol. 380] **Mr. Allen:** That is correct. I agreed those are photographs of George Knight books.

Mr. Kingsland: That is right.

Mr. Allen: Yea.

Q. 9. Now, I show you these six sheets of the records of the George Knight Company, and I will ask you to look at those sheets and, first, tell me what was the nature of the record that was preserved in that record book, that is, just explain what the entries there mean.

A. These sheets are pages from a book in which orders were entered as they were received. When the order was received, the entry was made of the shoe manufacturer who had ordered the die or whom the die was being made for, and they were all entered serially.

Q. 10. By serially, is that the column following the names on these sheets?

A. That is correct. From then on, when the die was manufactured, going through the factory, the one in relation to the first die at the top of the page, Sears Roebuck Company, that die from then on became No. 481, and it was always known through the manufacturing and through the billing, and through all the records, through the filing of the final records, as die 481. The number 481 was also stamped on the die itself. The letter C that follows [fol. 381] the 481 designated that that particular die was what was termed a "C" center, or a, in that particular case, that was a medallion die, or sometimes it was referred to as a center die. Now, that letter there is a note that gave us in the factory a designation of what the type die was. In the case of the fourth one down—

Q. 11. (Interrupting) Which sheet are you referring to?

A. Page 103.

Q. 12. Page 103, under date of—

A. (Interrupting) 1918.

Q. 13. 1918?

A. 1918. Now, the first three ones on this sheet happen to be all "C", meaning that they were the same type of die. Taking the fourth one down, the figure eight denotes that that was a die made on a circumference of an eight-inch radius, and that immediately brings to my mind that fact that that was the line of a tip perforation, a line of perforations made on the circumference of an eight-inch radius circle. Going down to the tenth one—

Q. 14. (Interrupting) Now, take the column—

A. (Interrupting) Yes, sir.

Q. 15. I don't believe that you need to go into that detail. I just want to get the significance of these other

columns. Now, the column of figures that follows the serial [fol. 382] number to the right, what does that indicate?

A. The \$20.70 means that that was the selling price of the die.

Q. 16. Yes.

A. That the die was billed to the customer, \$20.70.

Q. 17. What was the next column?

A. The ten means that the price of the die was charged to them at ten dollars.

Q. 18. Now, will you tell me when the dates in the left-hand column were placed there?

A. That is to show that the die was shipped and billed. That date was not put on the book until the work had been completed and the die had been shipped, so that the die 481, there is no record here to show anything except that it was shipped on June 17, 1918.

Q. 19. You are just taking that one as an example?

A. I am taking that as an example, yes.

Q. 20. Will you tell me whether or not this book or part of it is in your handwriting?

A. The page 103 that I am looking at is from all my handwriting; there is no one else's handwriting on that page.

Q. 21. Well, it was part of your duties during this entire period to assist, at least, in keeping this book?

A. I had charge of keeping the book.

[fol. 383] Q. 22. Had charge of keeping the book?

A. Yes, I had charge of keeping the book. I might have had a little assistance at times, but I had the principal charge of it.

Q. 23. Yes. Now, I show you a die which has been marked in evidence in this case as Defendants' Exhibit F, and will ask you whether you can identify that die, and from your records fix the date of the shipment of that die?

A. I can.

Q. 24. And tell us how you do it?

A. The serial number stamped on the back of this die is No. 609, and the serial number on the medallion or center portion of the die is 610. Now, 609 on this sheet carries eleven and a half, which means that the radius of this line of tubes that forms the tip is on an eleven and a half radius. The number 610 carries the letter C. Now, the letter C denotes that it is the center or medallion decora-

tion of a die. The record shows that No. 609 and 610 were shipped to Johansen Brothers Shoe Company on August 10, 1918.

Q. 25. And you are referring to the sheet marked 107 at the top of this record that you have referred to?

A. I am.

[fol. 384] Q. 26. Now, are you able to say from your record whether this die was made and shipped as of the date— A. (Interrupting) It was.

Q. 27. That you have given us? A. It was, yes.

Q. 28. Now, in connection with this die, I call your attention to the fact that there are side depressible strips on the plate. Are you able to say whether or not that construction was part of the factory construction when it went out?

A. It was, and it is a most necessary part of the construction. Without those slots, the elevated gauge would not have its clamping function.

Q. 29. And you were familiar with the construction at that time? A. I was familiar with it.

Q. 30. Now, I want to ask you this: Were you familiar with these George Knight machines, a general example of which is in the court room? A. I was.

Q. 31. Will you state whether or not the die was so arranged that when placed in the machine in operative position, whether the plate, the top plate could be pressed down and was pressed down by the operator?

A. It had to be in that position, or it could not perform its function.

[fol. 385] Q. 32. Now, I understand that you have examined this machine that is in the court room at the present time.

A. Yes, sir.

Q. 33. Is the presser plate a standard presser plate in this machine?

A. No. That is not. That presser plate extends a good deal farther forward in the machine than was necessary to operate this die.

Q. 34. Has your company sold those machines? A. Yes.

Q. 35. So that you were perfectly familiar with the construction? A. I was.

Q. 36. Now, with respect to the slot in the supporting plane, I understand that you have examined that slot.

A. Yes, sir.

Q. 37. And is that slot of the normal depth of the standard machine that was sold as early as 1918, or thereabouts?

A. No. That slot has been extended a good deal farther towards the back than normal.

Q. 38. Now, I show you another die, which I mark for identification Defendants' Exhibit H, and will ask you to examine your records and tell us when this die was made and shipped, if you can.

A. Now, before I examine the records, I immediately [fol. 386] know and that this die, two portions of this die were made and shipped at two different times.

Q. 39. All right.

A. This portion of the die carrying tip line No. 434 was shipped to Robinson Bynum Shoe Company. They were located in Auburn, New York. I state that from recollection.

Q. 40. That is the place they were located?

A. Their factory.

Q. 41. But you don't state the purchaser's name from recollection?

A. No. That was shipped to Robinson Bynum Shoe Company on May 31, 1918. The center medallion No. 320, which I will find on the record marked "C", was shipped to Robinson Bynum Shoe Company on May 4, 1920. That is, it was customary in those days to, from time to time, change the design of this part of it, and it was only necessary for the shoe [manufacture] to die the center portion of the die. He could have this part of the die in use and have several different designs of medallion decoration, and he could buy them from time to time, as style changed, still utilizing this part of it that he had, or he could buy this part of it new and use that part (indicating).

Q. 42. When you say "this part", you mean the plate part?

A. The whole portion of this die, with the exception of [fol. 387] this piece in here (indicating).

Q. 43. Well now, are you able then to say that both parts of that die were made and shipped by the George Knight Company by 1920? A. They were.

Q. 44. Yes. Now, will you tell me, with respect to that die, how that is operated, that is particularly with respect to how the work is put in?

A. Why, the work—they had several different ways of

locating that line. The most practical and usable way was to mark the line of the stitching with a stencil pattern, the same as I seen exhibited here; they would mark them with a stencil.

Mr. Allen: (Q.) Here?

A. Here, this one mark. This shows a line of stitching, this shows the center.

Mr. Kingsland: The witness is referring to a piece such as F-1.

Mr. Allen: Such as on the F-1. I will want to refer to that again, because Mr. Altvater said that was not the stitching line.

Q. 45. Well, now, when you say a stitching line, do you mean a line that is marked on the work piece with ink?

A. It is a line marked on the work piece with ink. It is [fol. 388] where—it is an approximate place where it would be stitched, only it is stitched from the other side. It is a locating line rather than a stitch line.

Q. 46. Now, you heard the testimony here this morning with respect to the other dies and the method of gauging against an edge of a die piece put on.

A. That is a different type of—a little different type of construction than this.

Q. 47. That is right. A. Yes.

Q. 48. Now then, were you familiar with the use of this die with that type of construction?

A. Oh, yes. In that case, in that case you did not need to have this line (indicating), because this line then is already designated.

Q. 49. You are referring now to the ink line?

A. The ink line, yes. In this particular construction, you did not need the ink line, because this line was already designated by the edge of the tip.

Q. 50. Now, you are referring to pieces such as Exhibit F-2. You probably do not know that, but let the record show it. Then there was one this morning that was discussed where the perforation had been put in before the medallion was put on. Was that a construction that was used in the die such as Exhibit H?

[fol. 389] A. Yes. Yes. Many times the line of perforation was previously marked and the perforation put on by, as

we term it, feeding perforator, and then that line of perforation was used as a gauge to gauge this medallion. In that case, when you were doing that operation, the tip or edge perforating portion of the die would not be in there.

Q. 51. You would simply perforate the medallion part and line it with the edge of the gauge?

A. Yes. In that particular case. If the tip was already perforated.

Q. 52. Now, in this Defendants' Exhibit H, when that die was used and brought to cutting position in the machine, was it so arranged with the machine that the top plate would be pressed down to clamp the work and hold it in the gauged position? A. Yes.

Q. 53. And that was the standard operation?

A. That was a standard operation.

Mr. Allen: I will state that question and answer are too vague.

The Witness: It was a standard operation.

Mr. Allen: Oh, well, I can cross examine him on the point. Go ahead. He has already answered. Go ahead. [fol. 390] I think it is indefinite.

Mr. Kingland: What is indefinite?

Mr. Allen: If the press head comes down on the top of that plate, why what is it going to do? To push it down, the way your question was put.

Q. 54. Was it pressed down by the operator's hand in the construction such as Defendants' Exhibit H, that is, did the operator hold it in position?

A. The operator pressed it down with the operator's hands.

Mr. Allen: All right. Now the witness has now placed his fingers back where the line of dimples are made in this plate.

Q. 55. Are those dimples?

Mr. Allen: That is what they call dimples.

A. Those dimples are not placed there to show the operator where to place their fingers.

Q. 56. Well, now, what was the fact as to how the op-

erator did press it down, was there any significance as to where the operator put her hand?

Mr. Allen: If the Court please, that seems to me a purely leading question.

A. The stop on the die was generally—there should be a stop on the bottom of this die, so the die, when it is in operative position in the machine, so that the die won't go [fol. 391] any farther under the striking head of the machine than is necessary to have it press down on the work, and the stop on the die was placed to keep that—usually you place it so it would just about go under the striking head of the machine, and the operator knew, if she kept her fingers back of that line, that her fingers could not be injured. If her fingers were ahead of that line, then she would injure her fingers.

Q. 57. In other words, the stop, as I understand you have described it, that was in the standard machine, would hold the plate, the whole die plate out far enough so that there was position for the fingers of the operator when the die was in cutting position? A. That is correct.

Mr. Allen: Yes. Leading question, I submit.

The Court: Sustained.

Mr. Kingsland: What was that?

Mr. Allen: Leading question. I am just making an objection for the record.

Mr. Kingsland: Did the witness answer?

The Court: Yes, he answered. He said, "That is correct" to your question.

Mr. Kingsland: Did Your Honor sustain the objection?

The Court: Yes, I sustained the objection. You [fol. 392] called for a "Yes" answer and the witness gave it to you, and it was leading.

Mr. Kingsland: Well, I want to avoid it, personally.

The Court: I believe the witness knows enough about that to explain how it operates.

Mr. Kingsland: I know he does.

Q. 58. Well, in order that I may get the record perfectly straight on that, will you take this die, Defendants' Exhibit H, and tell us just exactly how that operation took place?

A. The operator placed this work under this gauge until the edge of this gauge was correctly aligned with the top of the edge in approximately that position (indicating).

Q. 59. Now, you have got it so that the line—

A. (Interrupting) So that the edge, the edge of the top is lined up to the edge of the gauge.

Q. 60. Yes.

A. The reason it only touches on one end here of it is because this gauge happens to be one arc of a circle, while the tip is another one.

Q. 61. Yes.

A. If the shoe was being perforated on a die that was correct, then this line of the tip and this gauge would have the same arc.

Q. 62. I see.

[fol. 393] A. In a correct die. So the operator places that under that position there. In this particular case, this die was drawn out of the machine onto that extended bed by holding the die out with the belt that Mr. Altvater described. Now, with that die held out there in that position, the operator placed it in the position I show you here, then clamping this means down on to the die, holding this in position so it could not slip, by pressing the fingers down on top of the plate, the die worked—the operator's fingers and all was allowed to go forward until it brought up against the die, stopped against the stop in the frame of the machine. When that had gone in as far as it could go in, the operator knew then the die was in operative position. Still holding her hands on the clamp, the machine performed its cutting operation.

Q. 63. Now, I show you a blueprint and ask you whether you can identify it. The blueprint is identified as Defendants' Exhibit I, ask you whether you can identify this blueprint? A. Yes.

Q. 64. What is that?

A. That is a blueprint of a die of the same type and character as this die here (indicating).

Q. 65. Now you are referring to Defendants' Exhibit F?

A. Right. That is correct.

Q. 66. And where did that blueprint come from?

[fol. 394] A. That blueprint was brought to the factory of the George Knight & Company by an employee of the H. C. Godman Company.

Q. 67. And what is the date of that one?

A. March 10, 1922.

Q. 68. Now, state whether or not that blueprint shows the die structure with slits at the side such as we have both in Defendants' Exhibit F and Defendants' Exhibit H? A. Yes, it does have the same slits.

Mr. Allen: May I see the print?

(Mr. Allen examines the said blueprint.)

Mr. Kingsland: I would like to offer in evidence the Defendants' Exhibits G, G-1, G-2, and also offer in evidence the die, Defendants' Exhibit H, and the photostats of the record book, comprising six sheets to which the witness has made reference, as Defendants' Exhibits J-1 to J-6. I also offer in evidence the blueprint identified by the witness as being a blueprint of a die of the type of Defendants' Exhibit F.

(The said exhibits were so marked by the reporter.)

Mr. Allen: Well, as far as this blueprint is concerned, I don't know how important it is, but he certainly has not proved anything by that blueprint.

The Court: Overrule the objection.

[fol. 395] Mr. Allen: Let it go in for what weight it has.

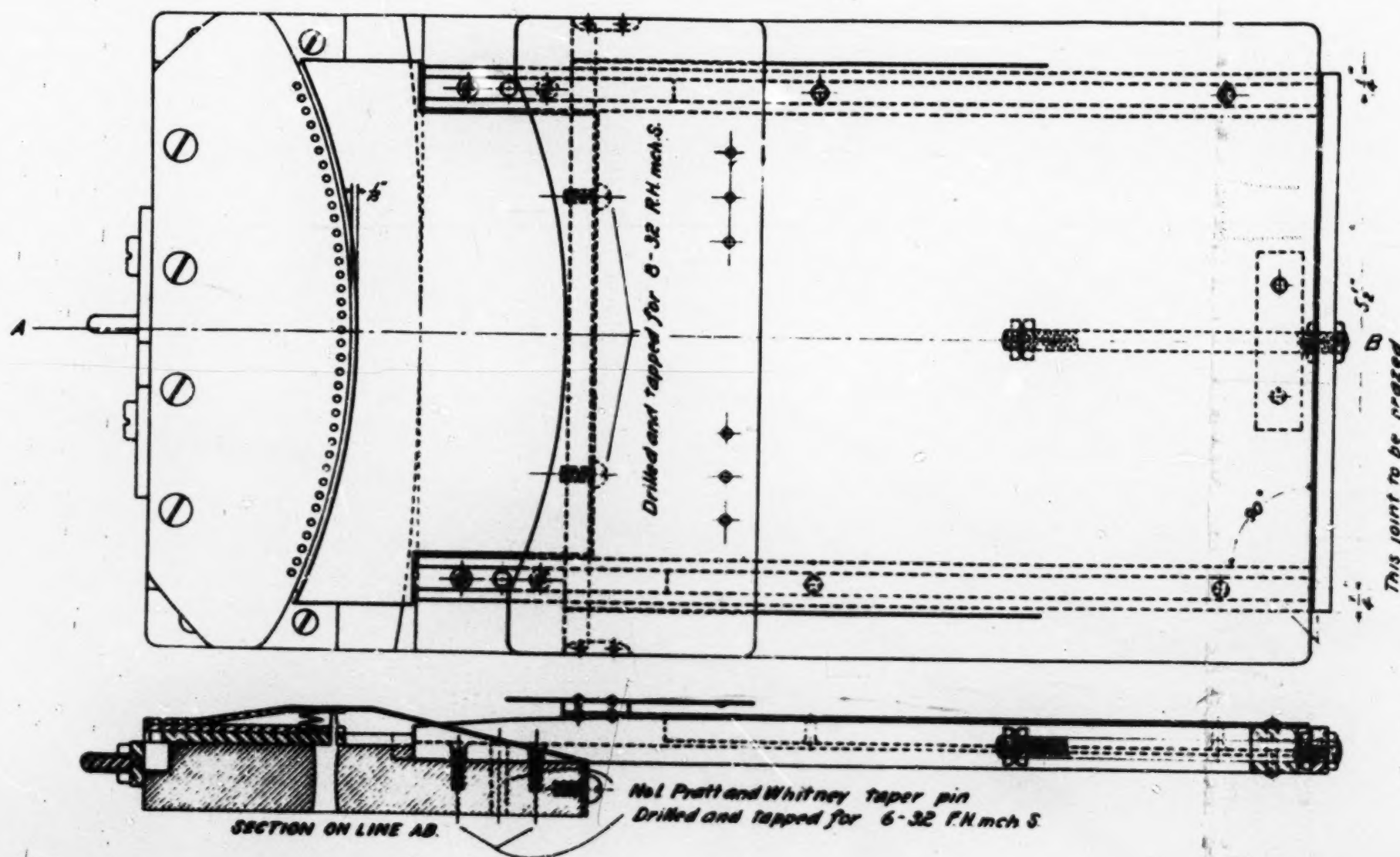
Defendants' Exhibit G—Die—Offered in Evidence. (Physical Ex.)

Defendants' Exhibit G-1—Dunbar Pattern—Offered in Evidence. (Physical Ex.)

Defendants' Exhibit G-2—Shoe Part—Offered in Evidence. (Physical Ex.)

Defendants' Exhibit H—Die—Offered in Evidence. (Physical Ex.)

Defendants' Exhibit I—Blueprint—Offered in Evidence.



**INT. TIP PERFORATING
ATTACHMENT.
KNIGHT PERFORATOR.
H C GODMAN CO.**

DRAWN BY FWH
DATE 3-10-23

1001

550

[fol. 397] Defendants' Exhibit J-1 to J-6, Inclusive—Photostatic Copies of Six Sheets Out of Record Book—Offered in Evidence.

Defendants' Exhibit J-1.

1	A. J. Bates Co	691 1/4	6 1/2	12
2	"	692 1/4	15 1/2	12
3	Schill Shoe Co	693 1/4	3 1/2	12
4	"	694 1/4	4 1/2	15
5	W. L. Douglas Shoe Co	695 1/4	12 1/2	15
6	"	696 1/4	15 1/2	15
7	P. J. Harney Shoe Co	697 -	4 1/2	12
8	W. H. McEwen & Son	698 1/4	12 1/2	12
9	Florsheim Shoe Co	699 -	10	12
10	"	700 -	5	15
11	W. W. Harriette	701 -	10	15
12	W. L. Douglas Shoe Co	702 1/4	20 1/2	12
13	Emerson Shoe Co	703	23 1/2	15
14	John R. Emerson Co	704 C	20	15
15	W. L. Douglas Co	705 1/4	5 1/2	15
16	"	706 -	18 1/2	15
17	Johnson Bros Shoe Co	707 -	19 1/2	15
18	Hansen & Son	708 1/4	21 1/2	15
19	Diamond Shoe Co	709 -	12 1/2	15
20	E. A. Eaton Co	710 1/4	30 1/2	15
21	Gray Newell Co	711 1/4	37 1/2	15
22	Scott-Shambelan	712 C	18 1/2	15
23	"	713 C	25 1/2	15
24	"	714 C	23 1/2	15
25	Lyons & Hershenson	715 -	10	15
26	"	716 C	16 1/2	15
27	Spang Adams Co	717 1/4	22 1/2	15
28	W. L. Douglas Shoe Co	718 1/4	15 1/2	15
29	"	719 -	16 1/2	15
30	"	720 -	17 1/2	15

L

25	Field & Flint Co	751 nla	15	12
25	"	752 nla	16 ²⁰	12
25	"	753 nla	20 ²⁰	12
25	"	754 A	15 ²⁰	12
25	"	755 A	17 ¹⁰	12
25	"	756 A	22 ²⁰	12
25	"	757 A	20 ⁴⁰	12
25	"	758 A	17 ²⁰	12
25	"	759 A	21 ²⁰	12
25	"	760 A	20 ⁴⁰	12
25	Geo E Keith Co #9	711 C	4	
15	"	712 C	4	15
10	"	713 C	4	12
11	Hurley Shoe Co	714 C	21 ¹⁰	12
5	Ed Dittenhofer Sons	715 C	25 ³⁰	12
10	Conrad Shoe Co	716 C	15	15
2	Williams & Knudsen	717 C	7 ²⁰	12
1	E G Hochman Co #2	718 C	14 ²⁰	15
10	Geo E Keith Co #2	719 C	15 ²⁰	12
5	Menchen Co	720 C	11 ²⁰	15
1	Richards & Temple Co	721 C	15 ³⁰	15
1	Rehull Bros Co	722 C	17 ²⁰	15
1	Dittenhofer Sons	723 C	16 ²⁰	15
1	A Eaton Co	724 C	15	15
1	"	725 C	10 ²⁰	15
1	Conrad Shoe Co	726 C	25 ³⁰	12
1	"	727 C	20 ¹⁰	15
1	"	728 C	18 ²⁰	15
1	"	729 C	51	1
1	"	730 C	14 ²⁰	15

Defendants' Exhibit J-3.

103

June 17	Seas Steel Co	151	2070	10
17	"	152	1920	10
17	"	153	1350	10
May 31	Steel	154	9 ⁰⁰	20
21	"	C	27 ⁰⁰	10
June 10	Sam B. Wolfe Shoe Co	9	11 ⁰⁰	10
7	Prof. Flechheimer Co	12	30	25
May 17	J. H. Vinchell & Co	488	920	10
16	"	489	20 ⁰⁰	10
June 20	Geo. E. Keith Co	150	17 ⁰⁰	10
20	"	151	17 ⁰⁰	10
May 24	Witherell & Lott Co	472	16 ⁰⁰	10
June 5	Wise & Cooper Co	473	20 ⁰⁰	25
5	"	474	34 ⁰⁰	25
May 31	Shoe Mfg. Co	475	8 ⁰⁰	20
June 5	Dunne & McCarthy (Lut.)	476	19 ⁰⁰	20
5	"	477	17 ⁰⁰	10
	Bartlett, Somers Co	478	18 ⁰⁰	25
May 27	"	479	14 ⁰⁰	10
31	Yale Bros. Inc. Exter	500	11 ⁰⁰	10
June 20	Geo. E. Keith Co	501	31 ⁰⁰	10
12	Holland Shoe Co	502	16 ⁰⁰	10
12	"	503	25 ⁰⁰	10
12	"	504	12 ⁰⁰	10
24	Forbush Shoe Co	505	18 ⁰⁰	10
26	"	506	11 ⁰⁰	10
18	Whitman's Keith Co	507	17 ⁰⁰	10
20	J. May & Co	508	8	10
11	E. C. Taylor Co	509	11 ⁰⁰	10
12	A. M. Enright	510	11 ⁰⁰	10

Aug 22	J. J. Cousins Co	601 -	26 ¹⁰	25
22	"	602 ⁵⁰	9 ²⁰	12
22	"	603	11 ²⁰	12
22	"	604	24 ²⁰	12
22	"	605	24 ²⁰	12
17	Forbush Shoe Co	606 ¹⁰	24 ²⁰	10
22	Sam B. Wolfe Shoe Co	607 9	16 ²⁰	12
22	"	608 9	17 ²⁰	12
10	Johansen Bros. Shoe Co	609 ¹⁰	9 ²⁰	25
10	"	610 C	15 ²⁰	10
27	J. W. Carter Chicago Co	611 ¹⁰	13 ²⁰	10
22	Dunne & McCarthy Luban	-	54 ²⁰	25
22	"	613 C	22 ²⁰	10
24	E. P. Reed & Co	614 -	22 ²⁰	25
24	"	615 C	10 ²⁰	10
24	Geo. A. Slater, Ltd	616 ¹⁰	15 ²⁰	10
24	M. D. Dodge Shoe Co	617 ¹⁰	11 ²⁰	20
24	Reynolds & Briggs, Inc	618 7	20 ²⁰	20
24	"	619 C	20 ²⁰	10
24	Reed & Co	620 -	11 ²⁰	20
24	Holland Shoe Co	621 15		
24	Shoe Co Whitman	622 C	16 ²⁰	20
24	Shoe Co	623 12	15 ²⁰	20
24	Shoe Co	624 -	17 ²⁰	20
24	Shoe Co	625 -	17 ²⁰	20
24	Shoe Co	626 C	21 ²⁰	20
24	Shoe Co	627 14	24 ²⁰	20
24	Shoe Co	628 14	15 ²⁰	20
24	Shoe Co	629 14	15 ²⁰	20

Defendants' Exhibit J-5.

13

21	W. H. Mc Elwain Shoe Co	301	C	112	12
22	"	302	C	222	12
23	"	303	C	304	12
24	"	304	C	204	12
25	"	305	C	212	12
26	Forbush Shoe Co	306	C	112	12
27	W. H. Mc Elwain Shoe Co	307	%	112	12
28	"	308	%	62	12
29	"	309	%	112	12
30	"	310	%	92	12
31	"	311	%	112	12
32	"	312	%	112	12
33	"	313	-	112	12
34	J. M. Hoyt Shoe Co	314	-	112	40
35	R. H. Long Co	315	-	112	12
36	"	316	-	112	12
37	"	317	C	112	12
38	"	318	C	112	12
39	P. J. & Hutchins Rock	319	C	112	12
40	Robinson Dynamite Co	320	C	112	12
41	P. J. & Hutchins Gun	321	-	112	12
42	W. H. Mc Elwain Shoe Co	322	%	112	12
43	"	323	%	112	12
44	W. H. Mc Elwain Shoe Co	324	%	112	12
45	"	325	%	112	12
46	"	326	%	112	12
47	"	327	%	112	12
48	J. Wright Shoe Co	328	-	112	12
49	W. H. Mc Elwain Shoe Co	329	C	112	12
50	"	330	C	112	12

Defendants' Exhibit J-6.

JL

	91	0	27	15
	92	10	15	15
	93	11	22	15
Calumet	94	12	20	15
Shoe Co	95	13	40	15
	96	-	49	50
Shoe Co	97	14	42	15
E. Taylor Co	98	15	30	15
	99	-	46	15
	100	-	16	50
Shoe Co	101	C	16	15
P. Reed & Co	102	13	5	12
	103	-	32	40
	104	-	18	40
	105	-	20	40
White Shoe Co	106	A	12	15
W. Baker Shoe Co	107	C	17	15
A. Corbinson Co	108	C	19	15
	109	-	36	12
Capin Denham Co	110	1/2	12	15
High Valley Shoe Co	111	C	19	15
J. & Mc Carthy Bros	112	-	42	45
Huchins & Temple Co	113	C	18	15
Johansen Bros Shoe Co	114	C	26	15
Sachs Shoe Co	115	10 3/4	25	15
Mitchell-Gumt Co	116	6	11	15
	117	C	10	15
E. Keith Co	118	C	19	15
	119	C	16	15
	1200	-	20	15

[fol. 404] Q. 69. With respect to this blueprint, and referring to it, are you able to say whether or not, as early as the date of this blueprint, the dies were constructed with the slits at the side?

A. The dies were constructed with the slits at the side at least five years before this blueprint.

Q. 70. Well, where did this blueprint come from?

A. The H. C. Godman Company had, or some official of the H. C. Godman Company had little ideas of their own in regard to little minute construction dies, and they thought they could make a few improvements on some of the structure, little improvements on some of the structure, and they wanted these dies to exactly—all dies made for all their factories to exactly interchange from factory [fol. 405] to factory, and they requested that these dies made for them particularly be made to follow the exact details of this blueprint. This blueprint was not made to show the George Knight Company how to construct this die, but to get the exact dimensions of their particular dies.

Q. 71. And has that blueprint been in your possession?

A. This blueprint has been in my possession up to about two years ago.

Q. 72. And then to whom did you send it?

A. Mr. Altvater.

Mr. Kingsland: I omitted the offer of G-3. I understand that there was one shoe part marked G-3.

Defendants' Exhibit G-3—Shoe Part—Offered in Evidence. (Physical Ex.)

Mr. Kingsland: You may inquire, Mr. Allen.

Cross Examination.

By Mr. Allen:

XQ. 1. Are you familiar with the Rogers vamp marker machine that used to be used largely?

A. Why, yes, I know it in a general way.

XQ. 2. What was the Rogers vamp marker used for?

A. My recollection of the Rogers vamp marker was that it was used principally to locate the position of stitched on tips when the tips were stitched on to what was termed a cut off toe vamp.

[fol. 406] XQ. 3. They were adjustable, weren't they, so that you could put stab marks on a vamp, one at the toe part, one at the front of the toe, and several little stabs at the sides?

A. Oh, I don't think I am competent to testify about a machine that I have very little knowledge of.

XQ. 4. Did you ever hear of vamps being located in dies by means of the stabbing marks or pin prick marks placed on the vamps? A. Yes. That was done to some extent.

XQ. 5. Your testimony is that that was not done to near the extent as inscribing of lines on the back of the vamp?

A. I don't think so.

XQ. 6. Well, what is your testimony, I mean yes or no,—was this business of putting stabblings for locating purposes used more largely for vamps, or was inscribing a line? A. Inscribing a line was used more largely.

XQ. 7. That is your testimony. And what do you base that testimony on? A. On my own observation.

XQ. 8. Where?

A. In shoe factories throughout the breadths of this country.

XQ. 9. All right. What is the scope of your travel throughout the breadths of this country in 1915 to 1922?

A. Very extensive.

[fol. 407] XQ. 10. What was the scope of the die business in connection with which you would call on customers?

A. I don't understand your question.

XQ. 11. Well, I will change the question. Name some factories that you visited in those days, name ten factories.

Mr. Kingsland: Well now, if the Court please—

A. (Interrupting) During what days.

XQ. 12. During the years 1915 to 1922.

Mr. Kingsland: I don't think this is proper cross examination.

Mr. Allen: I think it is proper. He has testified that the inscribing of these lines on pieces of work was used more largely than the stabbing in locating the lines on these dies.

Mr. Kingsland: In his experience.

Mr. Allen: And I want to know what it is, and I [I] think I have a right to, sir.

A. I don't think I can state positively that I visited Johansen Brothers Shoe Company factory in 1915 or 1916 or 1917, I don't think I should be called on to make that statement.

XQ. 13. Well, can you name some factories that you went to during that period? A. Yes.

XQ. 14. Name some.

[fol. 408] A. A. M. Creighton, in Lynn, Massachusetts. Watson Shoe Company, Lynn, Massachusetts. Johansen Brothers, St. Louis, Missouri. Some of the various factories of the Brown Shoe Company in St. Louis.

XQ. 15. All right. Well, how about Creighton, what practice did they use in marking their vamps for locating the dies?

A. At what time? There has been evolution in shoe manufacturing, great evolution.

XQ. 16. No, I am talking about the time when you were testifying to here before on the stand, when you said that this inscribing method was used more largely than the other. A. Well, the first—

Mr. Allen: (Interrupting) Just read him the question, Mr. Reporter.

(The question was repeated by the reporter.)

A. I remember the method used by A. M. Creighton very distinctly, because that is a factory that I visited many times, and the common practice for them at that time was to use a stencil marker.

XQ. 17. Now, what time are you referring to?

A. At the time that I conceived and designed and had manufactured by George Knight & Company a die of the very purpose—for the very purpose that I hold in my hand, and exactly like this die.

Mr. Kingsland: (Q.) And what die is that?

[fol. 409] A. That is Exhibit F.

Mr. Kingsland: "F".

XQ. 18. Well, then, that must go back quite a piece, mustn't it, Mr. Brock, back to—what was the earliest date you testified to—1918?

A. I did not testify that 1918 was the first die ever made like that.

XQ. 19. Well, when was the first die ever made like that?

A. I should say offhand as early as 1916 or 1917.

XQ. 20. Now, you made a statement, Mr. Brock, that those slits were placed alongside the plate in Exhibit 609, by slits you mean those in the margins of the stripper, so that you could depress this type plate to act as a clamp, was that your testimony? A. That is correct.

XQ. 21. Now, was it your testimony that the device of Exhibit G could be used as a clamp?

A. I don't think I testified in relation to this die.

XQ. 22. You did not testify with regard to Exhibit G?

A. I don't recall that I did.

XQ. 23. Don't remember that kind of a die?

A. I don't remember anybody asking me any questions on that die.

XQ. 24. Well, do you remember that kind of a die?

[fol. 410] A. I should say offhand—

XQ. 25. (Interrupting) Do you remember that kind of a die? A. Very much so, yes, sir.

XQ. 26. All right. How did you clamp with that one?

A. In the same way as this one.

XQ. 27. All right. Let's see you do it?

(The witness demonstrates.)

Mr. Kingsland: All right.

The Witness: Understand there is a portion of this die missing.

XQ. 28. I understand, but you have pressed this plate down, haven't you? A. This plate down, yes.

XQ. 29. All right. You can press this one down too, can't you? A. Yes.

XQ. 30. What have the slits at the sides got to do with it, there are no slits in the sides at "G"?

Mr. Kingsland: Well, if the Court please—

A. (Interrupting) This piece here—

Mr. Kingsland: All right.

A. (Continuing) This top piece here is mounted—is mounted to form springs, so that the whole thing can give down.

XQ. 31. Let's get down to the point, Mr. Brock, of the exhibit. The fact that this whole plate can move down [fol. 411] has got nothing to do with this top clamp (I am referring to Exhibit G) being pressed down by the fingers at the rear, as I have shown you.

Mr. Kingsland: If the Court please, it seems to me that any question with relation to this die is outside of the direct examination. This witness did not identify, he did not testify to that at all.

Mr. Allen: Didn't he read anything out of his books on this die?

Mr. Kingsland: He did on "F" and "H".

Mr. Allen: Well, he says he is familiar with it, familiar with lots of things.

Mr. Kingsland: Well, I know, but I still think—

XQ. 32. (Interrupting) Isn't it a fact, Mr. Brock, isn't it a fact that the reason for slits that were put in the plates in these dies back there, when you were with George Knight & Company, was so as to provide in the non-sliding type of top plate for the possibility of the plate moving down with the press when the press came down on the work? A. I don't follow you.

Mr. Allen: Have you got one of those original dies?

XQ. 33. Well, let us assume for a moment, Mr. Brock, that instead of being a sliding member, this is a fixed [fol. 412] member such as we have in—oh, here is what I want. Now, in this die, Exhibit H, there is a spacer between the cross strip that you have called a gauge plate and those portions of the stripper plate to which the gauge plate is mounted; right? A. To elevate it above.

XQ. 34. To elevate it?

A. To elevate it above the stripper plate of the die.

XQ. 35. All right. So that you can slip the work under to the right? A. To partly elevate it, yes.

XQ. 36. To partly elevate it? A. To partly elevate it.

XQ. 37. So there is some thickness, some space between the stripper plate and this overlying plate, there is some little space?

A. Yes. That partially performs the function, yes, but only in part.

XQ. 38. Yes, it holds this plate, top plate in Exhibit H high enough so that the work can go under it?

A. No, no, no. That is the very reason that these slits are put in here, so that it can be elevated still higher.

XQ. 39. All right. Those slits are put in so that the whole thing can be bent up and hold it up like it is in this example? A. That is correct.

XQ. 40. That is the way the die would be used by the user, is it? A. That is right, yes.

XQ. 41. Now, what I want to ask you is if these side [fol. 413] pieces were not slit, when the press hits this die, see, it would actually have to bend the plate down, would it not, if you did not have these slits?

A. The plate goes down anyway.

XQ. 42. The plate?

A. The stripper plate goes down anyway.

XQ. 43. All right, the stripper plate goes down, but this little top plate is permitted to go down with the stripper plate because of the fact that the stripper plate is still at the sides where the top plate is mounted?

A. But the top plate cannot go down any lower than the platen of the machine drives it. The platen of the machine drives it to its normal position, as determined by the platen of the machine.

XQ. 44. I just want to ask a question as follows: Is this—is my statement correct or incorrect, as you recall your business when you made dies like Exhibit H: that the gauge plate was mounted on the stripper plate with some filler pieces in between which elevated the gauge plate? Is that correct, as shown here? A. Yes.

XQ. 45. All right. A. Yes.

XQ. 46. Those elevating pieces were mounted entirely on the slit sides of the stripper plate, is that correct?

A. That is correct.

[fol. 414] XQ. 47. All right. Now then, when the—what you would call the gauge plate, stripper and all—are struck by the press, is it not true that, because of the slit sides of the stripper, that extra piece that is inserted there is freed to go down as I now illustrate with my hands, so as to get out of the way of the press head?

A. This whole piece—

XQ. 48. (Interrupting) I am asking you is that true?

A. I don't understand your question.

XQ. 49. All right. I am pressing down on the top plate with my hand.

Mr. Rogers: Let the record show that there is no work in the die.

Mr. Allen: That is right.

XQ. 50. And I call attention to the fact that in doing so, I have depressed the slit sides of the stripper plate so that at their forward ends they are below the level of the stripper plate, have I not? A. You have.

XQ. 51. All right. And they are below the level of the stripper plate by an amount equal to the little elevating pieces that are inserted under that plate?

A. And that forms the clamp to hold the gauge. That is what makes the work stay in there.

[fol. 415] XQ. 52. And the reason why these plates are slit along the side is to permit that action to take place under the press head, is that not true? A. No.

XQ. 53. All right. Your statement is, flatly, that that is not true. That is what I want to get from you.

A. That what is not true.

XQ. 54. What I just said. In other words, the reason why the plate is slit in the die, Exhibit H, as it is, is to permit the extra thickness necessary for holding this little gauge plate up to pass by the ends of the stripper as I have illustrated? A. The—

XQ. 55. (Interrupting) Yes or No? A. No.

XQ. 56. That is what I want to know.

Mr. Kingsland: Well, now, the witness can explain.

Mr. Allen: Certainly, he can explain.

Mr. Kingsland: If you have anything further to say, why you have a right to say it.

The Witness: These slits—these slits are to allow the gauge to be elevated higher than the width would be normally, elevated sides, little elevated pieces, and these slits form on the stripper plate a spring or a clamping means.

[fol. 416] Mr. Kingsland: Is there anything further, Mr. Allen?

Mr. Allen: Yes. I would just like the witness to explain

why, in that Exhibit F, he testified about that, why aren't these side pieces bent up in that die?

The Witness: Why, they are bent up.

XQ. 57. Well, they are not bent up anything like they are in the die.

A. I can bend them up; I can bend them up, if you will allow me to bend them up, I can bend them so they will be in a perpendicular position.

XQ. 58. Just a moment, please, Mr. Witness. You have produced a die, Exhibit H, in which the side pieces, side slits have resulted in the lateral edges of the stripper plate being pushed up at quite an angle in the die, Exhibit H, is that correct? A. They are now.

XQ. 59. All right.

A. But I have no way of knowing what the condition was when the die was shipped.

XQ. 60. Can you and I not assume as correct that when the die was shipped, these slit parts were right down level with the rest of that plate?

A. You can assume anything that you want to. I say that it is not so.

[fol. 417] XQ. 61. You say when the die was shipped, those were bent up? A. To some extent, yes.

XQ. 62. To some extent. To what extent will you say?

A. To a reasonable extent.

XQ. 63. Well, illustrate a reasonable extent to me.

A. I should say a little less than this one is now.

XQ. 64. A little less? A. Yes.

XQ. 65. About halfway between where it is and even?

A. Because it is not necessary to have it bent up as high as that is to get the work in, but it is necessary to have it a little higher than the spaces show. This one here (indicating), I should say, offhand, if you want my opinion, has been bent down. This one (indicating) plainly shows that it has been broken and soldered, repaired. This is not—this die here (indicating) is not at all in the new condition it was when it was manufactured.

XQ. 66. Neither is the Exhibit H, is it—you are referring to Exhibit F?

A. Why, this die (indicating) has been repaired, it has been welded or soldered or something, so that, of course, has taken away the original shape of the piece to some

extent. There is not a die manufacturer in the world that would ship anything out in the condition that is.

XQ. 67. However, I call your attention to the fact that [fol. 418] the two slit sides in this die do not project up anything like you said.

A. They don't now, but if you want me to, I will project them up. It is very easy. It is very easy to project them up to any angle you desire.

XQ. 68. You say that the die, Exhibit F, is defective?

A. No, I don't say it is defective.

XQ. 69. Because these side strips are not pressed up enough?

A. No, sir. I say that this die plainly shows it has had some hard use.

XQ. 70. Where did the die, Exhibit H, come from?

A. I don't know.

XQ. 71. You did not bring it here? A. No, sir.

XQ. 72. Did you ever see it before?

A. I think I saw it in—within the last day or two, yes.

Mr. Allen: That is all.

Redirect Examination.

By Mr. Kingsland:

RDQ. 1. But you have no trouble identifying this die from your record book, its manufacture?

A. I don't mean I never saw it before until two or three days ago, no. I mean that for a long time I have not seen it, until two or three days ago. That according [fol. 419] to the records that I produced, that die is a die made according to those records.

RDQ. 2. And at the date you stated? A. Yes, sir.

Mr. Kingsland: That is all. Anything more, Mr. Allen?

Mr. Allen: Just a minute.

The Court: Well, we will take a recess at this point. Announce a recess of ten minutes.

(Recess, ten minutes.)

Mr. Allen: I just don't know whether the record showed

that, with regard to Mr. Brock, how long he has been with the Brockton Machine Company—since when?

The Witness: Since 1922.

The Court: Is that all with Mr. Brock?

Mr. Allen: There is just one other thing that I have got here. I want to look at it a minute.

The Court: You (addressing the witness) better take the stand.

Recross Examination.

By Mr. Allen:

RXQ. 1. Do you recall, Mr. Brock, some correspondence with Mr. Altvater back in 1923, with regard to the Freeman Patent mask? A. No, I cannot say that I do.
[fol. 420] RXQ. 2. Look at this letter and see if you remember receiving it.

(The witness examines a document.)

A. This is evidently a—some kind of a copy of a letter that purports to be from the Western Supplies Company to the Brockton Perforating Machine Company.

RXQ. 3. Attention—

A. Marked to the attention of Mr. Brock.

RXQ. 4. Did you have that copy prepared and gave it to Mr. Freeman? A. Not to my recollection.

RXQ. 5. Did your company not give him copies of quite a little correspondence that you had with Mr. Altvater in the early days of 1923, telegrams and things?

A. I believe he did come to our office and get copies of some sort or other, but what they were, I do not recall now. My recollection is that he got something or other.

RXQ. 6. Your testimony is, you do not remember receipt of this one letter at all?

A. I do not remember that letter in particular, no, sir.

RXQ. 7. Does it call to your attention the fact that Mr. Altvater, back in 1923, asked you to help him in connection with the proposition of the possibility of Mr. Freeman getting a patent on his mask, do you remember that?

Mr. Rogers: I think that is rather an improper question, Mr. Allen. Are you trying to derive that from this letter?

Mr. Allen: Well, I am not asking a question, Your Honor, that I know is an improper question, in order to bring an implication of fact into this record. I am asking him a question which, from my professional point of view, I think is entirely fair. Would you (addressing the reporter) mind repeating the question, since it has been objected to?

Mr. Rogers: Mr. Allen, I certainly did not mean that implication to be drawn from that.

(The question was repeated by the reporter.)

Mr. Rogers: My position is that the witness has not testified anything about whether Mr. Altvater asked him about something or not.

The Court: Cross examination. It would only be material, if at all, upon the question of whether it affects his interest as a witness in this case. Therefore, we overrule the objection. You may answer, Mr. Brock, if you can.

RXQ. 8. I will tell you, Mr. Brock, you may look at this whole lot, if you like, if that would refresh your recollection, just take a minute.

A. Why, I recall Mr. Freeman coming to our office and [fol. 422] inveigling us into letting him go through our files, if that is what you mean.

RXQ. 9. Yes, but my question is, do you recall having correspondence with Mr. Altvater, with reference to the proposition of Mr. Freeman getting a patent on his mask, and asking your assistance in that connection?

A. No, I do not recall Mr. Altvater asking my assistance in helping Mr. Freeman get a patent on a mask.

RXQ. 10. No, helping him in connection with the possibility of Freeman getting a patent on his mask; in other words, asking you what you knew about the subject; can you recall that, now that you have looked at what I have shown you?

A. No, I do not know as I knew at that time that Mr. Freeman was getting a patent on a mask.

Mr. Allen: In connection with this examination of this witness, Your Honor, I believe that the matter that I have been referring to is pertinent from the point of view of his testimony here. I would like Mr. Brock to send to the

Clerk of this Court a copy of a letter received by Brockton Perforating Machine Company, from A. W. Altvater, dated December 22, 1923.

Mr. Kingsland: If the Court please, I do not see the slightest materiality of this letter. This letter is [fol. 423] written by Mr. Altvater to the Brockton Machine Company. Of course, I haven't the slightest feeling about the Court having it before him, but I do not see that it is material at all. This witness says he does not remember getting the letter, and I am perfectly willing that, if Mr. Allen wants to read the letter, he can read the letter, read it into the record. I don't see any pertinency of it.

Mr. Allen: Well, the pertinency of it is, I want to go on with this witness and then ask him a question or two, possibly, but if he cannot remember receiving this letter, I cannot ask him any more.

Mr. Kingsland: It seems to me that ends it, as far as the witness is concerned. Now, in some other way, if you want to get the letter in the record, why put it in.

Mr. Allen: What this letter said, to which I call the witness' attention, if the Court please, is: "Did you find out anything regarding that mask or guide which I spoke to you about that Freeman is securing a patent on? We have been working around this angle a little, but we were positive he did not have them covered and could trim the socks off of him. If he did not have them covered, we could try a different way."

[fol. 424] Now, I think if this witness received such a letter, then I could ask him what he looked around about or thought about at that time in connection with the mask or guide, which I think throws light on his testimony here with regard to these dies and things.

Mr. Kingsland: You can go ahead and ask him that question now. He says if he had the original here now, it would not refresh his recollection as to that fact.

Mr. Allen: If it does not, it does not.

Mr. Kingsland: I do not want to be in the position of offering any letter which you want to get in.

Mr. Allen: No.

Mr. Kingsland: But I would like to register my objection to its pertinence.

RXQ. 11. I have read you that paragraph, Mr. Brock. Does that bring back to your attention any investigation made or any communication with Mr. Altvater whatever?

A. No, sir.

RXQ. 12. On the subject of the mask? A. No, sir.

Mr. Allen: No. That is all.

The Court: That is all, Mr. Brock.

Mr. Kingsland: All right. You may step down, Mr. Brock.

[fol. 425] I would like to put Mr. McDermott on.

CHARLES W. McDERMOTT,

a witness of lawful age, being duly produced, sworn and examined, testified on behalf of the defendants as follows:

Direct Examination.

By Mr. Kingsland:

Q. 1. State your name, your residence, and your profession or occupation.

A. Charles W. McDermott; 75 West Cedar Street, Boston, Massachusetts. Engaged in the practice of patent law.

Q. 2. You testified in the first suit, did you, between the parties here involved? A. As an expert witness, yes.

Q. 3. Now, will you just state briefly, for this record, what qualifications you have for considering mechanical structures and the interpretation of patents and other publications relating to structures?

Mr. Allen: Agree to his qualification.

Mr. Kingsland: Well, I would just like a brief statement in the record in this present record.

Mr. Allen: Very well.

A. Approximately five years, from 1906 to 1911, I was an Examiner in the United States Patent Office. Most of

[fol. 426] that time in Division No. 11, where applications relating to shoes and shoe material are examined. After resigning from the Patent Office, from 1912 to 1927 I was engaged in directing the building of a complete line of automatic shoe machinery. Since 1927, my work has been devoted practically exclusively to inventions, applications, and patents relating to shoes and shoe machinery. I have also had charge of a shoe factory in which the automatic machines were installed and tried out in the manufacture of shoes.

Q. 4. Now, in preparation for this testimony, have you heretofore considered the disclosures of the original Freeman Patent, No. 1,681,033, together with the history of that patent when it was an application in the Patent Office before it was issued? A. Yes.

Q. 5. Have you also considered the Patent Office history and the disclosures of the Reissue Patents to Freeman, Nos. 20,202 and 20,203? A. I have, without exception.

Q. 6. Have you studied the opinion of the Court of Appeals of the First Circuit in the case of Freeman versus the Premier Machine Company, including the record of the District Court and of the Court of Appeals? A. I have. [fol. 427] Q. 7. Have you studied the opinions of the Court of Appeals of the First Circuit, and also the opinions of the District Court in that litigation? A. I have.

The Court: You asked him the same question twice.

Mr. Kingsland: Did I, Your Honor?

The Court: (Q.) Didn't he? Didn't he ask you the same question twice?

A. Well, he embodied the same question, coupled with another part I had not answered before.

Mr. Allen: I imagine he has also studied the record in the Court of Appeals, in No. 9602 and its opinion, has he not?

Mr. Kingsland: Is that your question?

Mr. Allen: Yes. Might as well get him up to date.

Mr. Kingsland: All right.

Q. 8. You can answer Mr. Allen's question. A. I have.

Q. 9. Have you considered the structures of the flat bed

dies that have been put in evidence by the plaintiffs in this case, and numbered respectively Plaintiffs' Exhibits Nos. 1 to 5, inclusively? A. I have.

Q. 10. In ascertaining the meaning of a patent disclosure, [fol. 428] what are the primary sources to which you would go, in order to get a fact basis for the interpretation of the disclosures?

A. Well, ordinarily in construing the scope of patent claims, there would be three sources of information available, namely, the patent itself, the history of the application which matured into the patent, and the prior art.

Q. 11. And now, in the present instance, in interpreting the disclosures and claims of the Reissue Patents Nos. 20,202 and 20,203, what additional source, if any, have you?

A. The additional source of information is the opinion of the Circuit Court of Appeals of the First Circuit.

Q. 12. Have you reached any conclusions in regard to the extent of the novelty, in view of the opinion of the Court of Appeals of the First Circuit, recited in the disclosure of the Freeman Reissue Patent No. 20,202? A. I have.

Q. 13. Will you describe what, in your opinion, is the novelty of that disclosure?

Mr. Allen: Now, that is in view of the decision of the Court of Appeals of the First Circuit.

Mr. Kingsland: I did not ask him that. He can go to all sources he needs to.

Mr. Allen: Yes, because I object to the witness being asked to render an opinion as to what a decision of the [fol. 429] Court of Appeals of the First Circuit means, and I object to asking this witness questions in regard to a matter which is in the province of the Court to determine. I think the witness can bring out facts and things of that nature.

Mr. Kingsland: Yes.

Mr. Allen: But just to bald faced ask him to give his opinion on the subject, I don't think this is proper, just the place.

Mr. Kingsland: No. Of course the witness will confine himself to fact interpretation, and I request, of course, that the witness do that in answering this last question.

A. I understand, however, that you have stated me facts that, as an expert witness, I am entitled to express my opinion as to what, to my mind, those facts mean.

Q. 14. Yes, the fact conclusions, but of course no legal interpretation, I suppose, that is your opinion.

Mr. Allen: Well, my only point is that I cannot conceive that it would assist this Court near as much in his decision to have the witness express his opinion about whether he thinks the outcome of this case ought to be as to have you, Mr. Kingsland, express it in your brief.

Mr. Kingsland: Not at all. Not at all. This witness, [fol. 430] I would like to put in the facts by.

The Court: You may proceed to answer the question.

A. On page 426 of the Federal Reporter, Second Series, 84, in the case, Premier Machine Company versus Freeman, the Court of Appeals stated:

"In order to hold the lining in place, to prevent it from raveling when the shoe was worn, and to give the perforations a neat appearance, it was desirable that the leather and the lining should be sewed together around the perforations. This sewing might be done either before or after the perforations had been made. If the sewing was done first, the ~~die~~ dies had to be accurately centered on the sewed pattern when the perforation was made, so as not to cut the sewing."

On page 429 of the same reported decision, Judge Morton stated for the Court:

"The Freeman 'mask' serves as a clamp. It also serves as a gauge by which the material to be cut is positioned with relation to the die. For this purpose there is an opening or 'window' in the plate through which the material can be seen. This window is given an irregular shape corresponding to the outline of the [fol. 431] stitched pattern of the perforations which are to be made. Its use enables the stitching to be accurately placed with reference to the die, so as not to be cut by the die."

In view of these two related statements excerpted from

the decision in Premier Machine Company versus Freeman, it is my opinion that the Court of Appeals limited the Freeman structure so far as the mask group of claims is concerned to an operation in which the part to be ornamented by perforations was first provided with a sewed pattern—

(Mr. Allen starts to interrupt.)

The Witness: I am not through, Mr. Allen.

Mr. Allen: It is clearly improper, under the counsel's statement. He is purely stating a legal conclusion, which he purposes to draw from the Court of Appeals, which is not what he knows about the facts at all, if the Court please, hardly the province of an expert witness.

The Court: He may answer the question.

The Witness: May I have the last part of my answer read?

(The last part of the answer was repeated by the reporter.)

[fol. 432] The Witness: Of the ornamentations which are to be made in the work.

Q. 15. Will you pause there, Mr. McDermott, and illustrate just what the fact situation as applied to the operation is, using any method of illustration that you may have?

A. Referring to Plaintiffs' Exhibit No. 14, the opposite faces of the quarter show a stitched pattern—I should have said the opposite faces of the quarter each show a stitched pattern. Each face of the quarter in Plaintiffs' Exhibit No. 14 shows cut-outs which are located within the stitched pattern.

I have completed my answer on that.

Q. 16. Well, you may proceed with the main question.

A. In connection with the construction of the Freeman mask, Judge Morton stated, page 429 of the reported case:

“In order to hold the material to be cut firmly on the die and the stripper plate, a flat plate called in the early patents a ‘clamp’ and in the Freeman [Pat-ern] a ‘mask’ was used. It rested on the material and

held it against the stripper plate on the top of the die. It was cut out around the cutting edges of the die, so as not to dull or injure them; and it was hinged or anchored to the base of the die or to the support [fol. 433] so as to hold the material firmly against lateral movement.

The Freeman 'mask' serves as a clamp. It also serves as a [aguage] by which the material to be cut is positioned with relation to the die. For this purpose there is an opening or 'window' in the plate through which the material can be seen. This window is given an irregular shape corresponding to the outline of the stitched pattern of the perforations which are to be made. Its use enables the stitching to be accurately placed with reference to the die, so as not to be cut by the die."

Page 430, continuing, Judge Morton stated:

"Nothing in the prior art shows Freeman's conception of a clamp plate having a window of a shape and size corresponding to the pattern of the-decorations which were to be perforated. His improvement obviated the necessity of placing special gauge marks on the uppers; and we do not doubt that his window, inclosing the pattern and corresponding with it in size and shape, made accurate positioning of the work easier and quicker.

As we understand the plaintiff's brief it does [fol. 434] not really attempt to support the mask claims with any greater breadth than we have just indicated. If given greater breadth they are invalid. The plaintiff's contention is that the word 'shaped' in claim 16 and in other claims in which it is used, should be construed to limit them as above stated. In some of these claims the expression, 'partially surround that portion of the upper material to be ornamented,' appears as a further description of the window. It will be necessary to consider separately the claims in this group. Those covering a clamp plate or mask having a fixed relation to the die and having a window the outline of which is similar to the pattern to be perforated, and which is so placed with relation to the pattern and to the die as to be used as a gauge, are, we think,

valid. The mere use of a window in the clamp or of a straight curved edge in or connected with the clamp for gauging purposes did not involve invention in view of the [prioer] art."

Now, referring to claim 1 of Reissue Patent No. 20,202, which corresponds to claim 18 of the Freeman original [fol. 435] patent, the Court of Appeals applied the principles just stated in relation to what the construction must be covered by the claims to render those claims valid. The Court said claim 18 is good. Claim 18 is now No. 6 in the Reissue No. 20,202. This claim reads as follows:

"In combination with a cutting die having cutting edges for cutting designs in shoe upper material, a support for the die and a mask cooperating therewith, said mask being provided with one or [moer] edge portions to partially surround the cutting edges of the die, said edge or edge portions shaped to act as a gauge for the positioning of the material beneath the mask."

Now, the principle stated by the Court of Appeals, which was its measure for declaring claim 18 to be valid, and referring to Plaintiffs' Exhibit No. 13—

Mr. Allen: (Interrupting) Your Honor, I believe I object to this witness stating what the Court of Appeals intended, and so forth, and so on. He does not know that.

The Witness: I am saying—pardon me.

Mr. Kingsland: He is applying the facts as derived from that opinion to the situation of the physical structures.

The Court: Overrule the objection.

[fol. 436] The Witness: Pardon me. How did that start, that sentence?

(The last part of the answer was repeated by the reporter.)

The Witness: Plaintiff's Exhibit No. 13 has a clamp plate or mask, and it has a fixed relation to the die, because it is mounted on a pivot, and when located with reference to the die is held from any lateral or longitudinal movement. It has a window. Now, the Court of Appeals stated that this window must have an outline which is similar to the

pattern to be perforated and which is so placed with relation to the pattern and to the die as to be used as a gauge. Commencing with the first paragraph, commencing on page 430 of the decision, this clamp plate must have a window which incloses the stitched pattern of the ornamentations. The window inclosing the stitched pattern of ornamentations must correspond with said pattern in size and shape. The window in addition must have some part, some edge, of the complete edge inclosing the stitched pattern which acts as a gauge, and the part with which the gauge edge cooperates to properly locate the ornamentations to be placed within the stitched pattern must be the stitched pattern itself. The Court of Appeals stated that claim 18, [fol. 437] now claim 6 of the reissue patent, must be construed in the manner I have just stated, to render it valid. They then refer to—pardon me—subsequently they refer to claim. 81—pardon me—subsequently they referred to claim 70, which is now claim 8 of the Reissue No. 20,202. This claim reads as follows:

“In combination, a cutting die provided with cutting edges, a support for said die, a mask for the cutting die mounted on said support, comprising a flat plate adapted to be pressed against the work, said plate being provided with an opening through which the work may be observed and accurately positioned with respect to the cutting edges of the die.”

The Court of Appeals, with respect to claim 70, stated:

“Claim 70 [specifies] a clamp plate ‘provided with an opening through which the work may be observed and accurately positioned with respect to the cutting edges of the die.’ Construing this as referring to an opening so conforming to the size, shape, and position of the ornamentation, and so located with respect to them that it serves as a gauge this claim is valid.

Subsequently the Court of Appeals referred to claim 81, [fol. 438] which is now claim 90 of Reissue No. 20,202.

The Court: (Q.) Claim 9, is that what you meant to say?

The Witness: What did I say?

The Court: I thought you said 90.

The Witness: No. I meant to say 9. I am sorry.

Claim 9 reads as follows:

"In combination, a cutting die provided with cutting edges, and a holddown plate for the cutting die comprising a flat plate adapted to be pressed against the work, said plate being provided with an opening to surround the cutting edges of the die, one edge of said opening being arranged to act as a gauge for the positioning of a piece of work beneath the holddown."

Referring to this claim 81, which is now claim 9 of Re-issue No. [202,02,] the Court of Appeals stated:

"Claim 81 specifies a clamp plate with 'an opening to surround the cutting edges of the die, one edge' of which is 'arranged to act as a gauge.' Construing this to mean that the shape of the opening conforms to the pattern of the ornamentations and that one edge of it is so shaped and located with respect to them as to serve as a gauge, it is valid."

[fol. 439] Construing these claims referred to specifically by the Court of Appeals, namely, claims 6, 8, and 9 of Reissue No. 20,202, these claims are limited, limit the scope of the Freeman invention, first, to the character of the work to be ornamented, in that it must be a piece of work provided with a stitched pattern for the ornamentations which are to be subsequently cut into that piece of work. It limits the mask to a clamping plate having a window which completely surrounds the pattern of ornamentations. The window must correspond with the pattern of ornamentations in size and shape. As a further limitation of the window a portion of the edge of the window must be shaped as a gauge with respect to the pattern of ornamentation.

Mr. Allen: I think when you say "patent" and "pattern", the reporter kind of hesitates each time.

(Referring to the witness dropping the "r" when pronouncing the word "pattern".)

A. I am sorry. I have been called down for that—my Boston talk—patent and pattern.

Mr. Allen: Better ask another question.

Q. 17. With respect to the significance of the term ornamentation, as you derive it from the opinion of the Court of Appeals, from the fact standpoint, that is, orna-[fol. 440] mentation of the shoe, what do you understand that to be?

A. Why, I understand your ornamentations to be the openings cut through the work by the cutting edges of the die.

Q. 18. Now, taking the interpretation of the disclosure of Reissue Patent No. 20,202 and comparing it with several exhibits introduced in evidence by the plaintiffs, Exhibits Nos. 1 to 5, inclusive, will you point out the similarities or dissimilarities between the structures of the disclosures in these exhibits. I would like you to take them up serially, so that your construction of them will be separately applied.

The Witness: May I have the question again, please?
(The question was repeated by the reporter.)

A. Referring to Plaintiffs' Exhibit No. 1, which is a die, and to Plaintiffs' Exhibit No. 36, which I understand is characteristic of a piece of work which would be ornamented by the die, Plaintiffs' Exhibit No. 1, I find that the piece of work is not that referred to by the Court of Appeals for the First Circuit, in that the portion of the work which cooperates with the gauge is not a fixed or permanent part of the work itself, and comprise ink marks which patent—Reissue Patent No. 20,202 referred to in this manner: Freeman stated, page 1, lines 43 et seq. of Reissue No. 20,202:

[fol. 441] "My invention herein [lines] in the provision of a machine and operating instrumentalities which will enable the openwork designs or formations to be cut out entirely through the upper or upper and lining and without previously marking or forming any pattern on the work."

I find that the die, Plaintiffs' Exhibit No. 1, is not provided with a window inclosing the portion cut out by the cutting edges of the die. A portion of the edge of the incomplete—pardon me—a portion of the edge of the clamp is shaped to engage the ink marks on Plaintiffs' Exhibit

No. 36, but not—but whether or not this portion acts as a guide, there is no window completely inclosing the area to be perforated and corresponding in size and shape with any stitched pattern of those ornamentations.

Referring to Plaintiffs' Exhibit No. 2 and the pieces of work, Plaintiffs' Exhibits Nos. 39 and 40, I find that the same condition exists, namely, the die is not provided with a window completely inclosing the area to be perforated, and I do not understand that any portion of that clamping gauge is shaped to cooperate with any part of the stitched pattern of ornamentations so as to act as a gauge.

Q. 19. Now, Mr. McDermott, you have referred to this as a clamp gauge. You are keeping in mind the testimony [fol. 442] of the witnesses with respect to this structure, where they referred to it as an elevated gauge?

A. Possibly not in my last answer. The rear edge of the elevated gauge is loose because of the absence of two of the rivets and normally rests upon the stripper plate. As I understand the construction, if the two rivets were in their proper position, the bottom face of the gauge would be spaced from the underlying stripper plate. As I understand the interpretations placed upon the claims of the Freeman Reissue patent No. 20,202 by the Circuit Court of Appeals for the First Circuit, to come within the scope of the claims in the Reissue No. 20,202 this gauge must also act as a clamp.

Q. 20. Now, in Exhibit No. 2, will you state whether or not in the functioning of that device, as you understand it, whether the plate, the upper plate is indeed a clamp?

A. No, it is not.

Q. 21. Now, will you consider the remaining structures relied upon by the plaintiff and as shown by the exhibit drawings?

The Court: I think we will stop here for the day. This will be a good place to stop.

Mr. Kingsland: Yes, sir.

[fol. 443] At this point, on Wednesday, February 7, 1940, an adjournment was had until 10:00 o'clock A. M., Thursday, February 8, 1940.

Met pursuant to adjournment at 10:00 o'clock A. M., on Thursday, February 8, 1940, and the following proceedings were had:

The Court: You may proceed with the case on trial.

Direct Examination Resumed.

By Mr. Kingsland:

Q. 22. I believe that there is an unanswered question on the record, Mr. McDermott. I will ask the reporter to read that to you, so you can continue your answer.

(The last question was repeated by the reporter.)

Mr. Allen: Now, there may be a little confusion between 3-A and 3 there. There is not very much difference, it is just some little detail.

Q. 23. I am referring to the drawings of the structure on Plaintiffs' Exhibit No. 3-A, attached to the stipulation of June 11, 1936; also to the illustrated construction in Plaintiffs' Exhibit No. 4, attached to the interrogatories filed by plaintiff, and likewise the drawing marked Plaintiffs' Exhibit No. 5, also attached to those interrogatories [fol. 444] and comprising in this case part of Plaintiffs' Exhibit No. 5.

A. Plaintiffs' Exhibit No. 3-A discloses a clamp gauge. The plate constituting the clamp gauge is not provided with a window inclosing the area to be perforated, and as I understood the testimony with respect to Exhibit No. 3-A, the work is provided with ink marks to which some portion on the clamp gauge registers to act as a gauge.

The Plaintiffs' [Exhibit] No. 4 discloses a die in which the upper plate is not provided with a window inclosing the area to be perforated, and as I understand the work upon which this die is to operate, the work is marked with ink lines with which some portion of the upper plate registers.

Plaintiffs' Exhibit No. 5 discloses a gauge of the elevated type, but the gauging plate is not provided with a window encircling the area to be perforated, and also the work, which I understand is operated upon by this die, Plaintiffs' Exhibit No. 5, is provided with ink marks which register with some part of the elevated gauge.

Mr. Allen: I wonder [is] counsel in a position to say

"which I understand is" and so on. If he does not know the kind of work on which that die can be used, how can [fol. 445] he stand up here and say, I understand it to be so and so, and so and so?

The Witness: From the testimony given in the case, Mr. Allen.

Mr. Allen: (Q.) You mean from Mr. Altvater's testimony?

The Witness: From the testimony given here, yes.

Mr. Allen: It should be so stated that that is the case, his understanding of somebody else's testimony.

The Witness: That is what I did state. I understood.

Mr. Allen: I thought Mr. Altvater said he did not remember, could not remember at all about the work.

The Witness: In that case, Plaintiffs' Exhibits Nos. 3-A, 4, and 5, do not disclose how the work was gauged.

The Court: (Q.) What do you mean by gauging the work?

A. One of the features of the Freeman invention as construed by the Court of Appeals for the First Circuit is a gauging edge which is used as a gauge with respect to a stitched pattern of perforations upon the work itself. It is necessary to have something on the work to which the edge of the window is shaped to gauge before the ornamentation can be properly placed in the desired location on the work. It is therefore impossible to determine what [fol. 446] this characteristic gauging feature is from Plaintiffs' Exhibits Nos. 3-A, 4, and 5, because there is no work shown in the drawings, and there are no gauge lines on that work; so, therefore, it was impossible to tell what portion of the work was used to line up the gauging edge of the window to serve as a gauge.

Q. 24. When you speak of the gauging edge of the window, are you speaking of the construction of the Freeman [Patnet]? A. Yes.

Q. 25. Distinguished from the construction as shown in these drawings? A. Yes.

Q. 26. Now, you have referred to the opinion of the Court of Appeals of the First Circuit. On page 429 of that

report, I note the expression "stitched pattern of the perforations", the Court saying with respect to that:

"This window is given an irregular shape corresponding to the outline of the stitched pattern of the perforations which are to be made. Its use enables the stitching to be accurately placed with reference to the die, so as not to be cut by the die."

Now, what do you understand to be the significance of that expression, "stitched pattern of perforations"?

[fol. 447] A. At the time the Freeman mask is used to gauge the work, the work is provided with the stitched pattern of perforations referred to by the Court of Appeals, and it is in connection with this stitched pattern of perforations that the Freeman gauge is employed.

Q. 27. Well now, I also note on page 426 of that opinion where the Court said, if the sewing was done first, the dies had to be accurately centered on the sewed pattern when the perforation was made, so as not to cut the sewing. What do you understand to be the significance of the sewed pattern as used there?

A. The sewed pattern referred to on page 426 of the opinion is, as I understand it, the perforations which the—pardon me—the stitched pattern of the perforations which are to be made, referred to on page 429 of the opinion.

Q. 28. Now, what are your reasons for that conclusion, either derived from anything else in the opinion or from the testimony upon which that case was presented?

A. When the Court established a principle on page 430 of the opinion, it referred to the pattern which is the sewed pattern or stitched pattern or perforations referred to on pages 426 and 429 referred to by you. When the Court referred to those claims which are valid, in the second paragraph, commencing on page 430 of the opinion, [fol. 448] it referred to the pattern again, which is the sewed pattern referred to on page 426 and the stitched pattern of the perforations referred to on page 429. When the Circuit Court of Appeals for the First Circuit construed claim 70, in the third paragraph, commencing on page 430, it used the term "ornamentation", but in view of the fact that the ornamentation is not in the work at the time of gauging operation, this term must refer back

to the sewed pattern—pardon me—to the phrase “sewed pattern” on page 426—the phrase “stitched pattern of the perforations” on page 429, and the two terms “pattern” used previously on page 430.

The Court: The witness has used that word “patent” all through there.

Mr. Kingsland: Yes. I told the reporter about that.

The Witness: I am sorry my distinction is not plain.

The Court: Well, you brought it out plain the last time, Mr. McDermott.

The Witness: Referring to the portion of the opinion on page 430, where the Court of Appeals for the First Circuit construed claim 81, the Court uses the phrase “pattern of the ornamentalations”, which as I understand it must be the [fol. 449] sewed pattern referred to on page 426, “the stitched pattern of the perforations” referred to on page 429, the two terms “pattern” used on page 430, and the “ornamentation” referred to in the third paragraph, commencing on page 430.

Q. 29. That is where the expression, “position of the ornamentation” is used? A. Yes.

Q. 30. Now, in construing that language, what physical structure, what position of ornamentation, what does that signify, in your opinion?

A. It means the stitched pattern within which the ornamentations are to be placed after the work is gauged and the machine operated to die out the piece of work.

Q. 31. Now, the ornamentations themselves, as you testified yesterday, as I understood, were the openings that were put into the shoe upper?

A. That is correct. Now, completing my answer to the question, to the previous question, I should have said, in the case of Premier Machine Company versus Freeman, on page 43 of the record, Mr. Freeman explained the character of the things which are placed on the work in order to provide something to which the gauge is located.

Will you (addressing the reporter) please read that last part of that answer?

(The last part of the answer was repeated by the reporter.)

[fol. 450] Mr. Allen: (Q.) What page is that? A. 43.

Q. 32. Page 43? A. Of the Premier record.

Q. 33. Right at the bottom of the page.

A. Mr. Freeman stated:

"The mask would be extended upwardly, and the upper would be put through the mask and on to the die with the upper draped over it, and the mask would be drawn down, and the upper placed with the gauging edges and the opening in the mask in alignment with the marks on the upper. In this instance it is mostly along these lines (indicating), and there is a row of stitching around where the cut-outs are going to come and along the goring in the center there is a line of stitching, and the top edge of the quarter. Those are all followed out in the edges of the opening in the mask and all those marks are within the outside edges of the upper."

As I understand that testimony, Mr. Freeman did not mean that the marks on the upper, the row of stitching around where the cut-outs are going to come and along the goring in the center and the top edge of the quarter, four different things were all used at the same time to which to gauge. He did state, however, that there is a row [fol. 451] of stitching around where the cut-outs are going to come, and this, as I understand the testimony, is the stitched pattern of perforations or ornamentations, which phrases were referred to in the Court of Appeals' decision.

Mr. Allen: Now, if the Court please, counsel—I mean Mr. McDermott, has referred to part of an answer of B. W. Freeman to a question in the Premier case. I suppose that is placed, that is offered in evidence, is it, that statement now, is it, as an admission?

Mr. Kingsland: Why, the entire record is in, and what the witness has done is simply to give the additional reason why he construes the particular terms in the opinion as being the sewed or stitched pattern of ornamentation.

Mr. Allen: Well, it seems to me that if a part—

Mr. Kingsland: (Interrupting) I understand this entire record is in.

Mr. Allen: Well, the record is in, but not for the facts

adduced by the witnesses, but to show what was before the Court of Appeals. This witness has again picked out a statement of Mr. B. W. Freeman. I think the statement complete should go in the record. I think it is only fair.

The Court: Well, it is in the record.

[fol. 452] Mr. Kingsland: It is in the record. He is taking that part to support the position he is taking, in addition to those references he has made to the opinion of the Court of Appeals. We are not introducing it as admission or anything else. We are simply introducing it as reference to the position that was taken before the Court of Appeals.

Mr. Allen: The only thing I wanted to say was—perhaps I was not following closely enough—the quotation which the witness gave, did it include Mr. Freeman's statement:

“Those are all followed out in the edges of the opening in the mask”—?

A. Yes.

Mr. Allen: “and all those marks are within the outside edges of the upper.” Did you read that, too?

A. Yes, Mr. Allen.

Mr. Allen: I see. Then I think that is fair, but I do not understand the answer of the witness when he said Mr. Freeman did not mean what I just read.

Mr. Kingsland: Well, you can probably put a different construction on the testimony justifying it.

The Witness: I have completed my answer to that [fol. 453] question.

Mr. Allen: Of course, as Mr. Sutherland points out, it is a little odd to have an expert witness interpreting what some witness means in another case. I think we can make more progress by going ahead, though, Your Honor.

The Witness: Another statement which forms a basis for the Court of Appeals' usage of the stitched pattern of ornamentations or perforations occurs in a brief filed by

the appellee before the United States Circuit Court of Appeals for the First Circuit in the case of Premier Machine Company versus Freeman. On page 23, it is stated:

"The gauging must be very accurate and not approximate only, because a very slight distortion is likely to misplace the ornamentation, and even to cause a cutting through of stitching in the upper. Also, the gauging must be very accurate with relation to the very ornamentations or stitching lines, with reference to which the shaped edge of the mask is adjusted."

Q. 34. Well, now, in your opinion, to what line, in order to respond to the language that was employed as a structural matter by the Court of Appeals for the First Circuit, must the gauging be done, in order to conform to what was [fol. 454] considered the invention of the Freeman Patent?

A. May I have that [question] again, please?

(The question was repeated by the reporter.)

Q. 35. By line, I of course include any configuration or any reference to configuration.

A. In my opinion it must—in my opinion, the gauging thing upon the work must be the stitched pattern of ornamentation. On page 430 of the opinion of the Circuit Court of Appeals for the First Circuit, the Court stated:

"His improvement obviated the necessity of placing special gauge marks on the uppers; and we do not doubt that his window, inclosing the pattern and corresponding with it in size and shape, made accurate positioning of the work easier and quicker."

In my opinion, this excludes special marks upon the upper and requires the gauging thing on the work to be the stitched pattern of perforation.

[W.] 36. When you say excludes the ink marking—

A. (Interrupting) Excludes, I said. Pardon me.

Q. 37. I say, when you say excludes the ink marking, do you mean that a die gauged against an independent ink mark, regardless of other considerations would not respond to the Freeman invention?

[fol. 455] A. That is, as I understand, what the Court of

Appeals did, excluded the use of special gauge marks on the upper as any feature of Freeman's invention.

Q. 38. Now, does any one of the structures as exemplified in Plaintiffs' Exhibit Nos. 1 to 5 have a window, in the sense of the structure defined by the Court of Appeals?

A. No.

Q. 39. Now, will you tell us what, in your opinion, is the significance of the term "window" as used in the Freeman disclosure?

A. The chief characteristic of the window disclosed in the Freeman Patent is that the window must enclose the stitched pattern and correspond with it in size and shape.

Q. 40. Now, when the term "mask" is used in the Freeman disclosure and in the claim, what do you understand the physical structure to be that is designated "mask"?

A. A mask [construction] must have a window complete inclosing the stitched pattern of ornamentation, must correspond with it in size and shape, and in addition, at least a portion of the window must be shaped as a gauge to line up with the stitched pattern of ornamentations to act as a gauge.

Q. 41. Now, Mr. McDermott, I would like you to compare directly claims that were retained in the Freeman [fol. 456] original patent after the disclaimer, but which claims are for subject matter not definitely distinguishable from the other claims disclaimed. I am asking you to take the claims, the definition of structure, and then to point out your reasons for your answer that may be given to this question.

Mr. Allen: If the Court please, I object [ot] the question. It relates, as I understand it, solely to the point of validity of the Reissue Patent No. [2q0,202] I think is the one he is talking about now, solely to that. And in the next place, we have listened to the witness' testimony which was supposed to be based on his expert knowledge of these devices, and it seems to me that he has advanced the cause in no respect in simply arguing [anout] what the Court of Appeals said, and so forth, and we have got all the facts here, I cannot see how there could be any prejudice to the other side in that [connnection] if this question is solely asked from the point of view, as I see it, of the defense of invalidity of the particular reissue, because

we did not disclaim what we should have disclaimed, then I don't think the question is a proper one, and I think that is what it is directed to.

Mr. Kingsland: Well, if the Court please, of course we have got two defenses with respect to Reissue No. 20,202, [fol. 457] which was the basis of the proof. We have the defense of invalidity of that patent, then in addition to that we have the counterclaim in this case, in which we set up the invalidity of both patents, in the nature of a declaratory judgment, and in this question its purpose is to develop the claims that were left in the Freeman original patent and before the reissue, and to show what their relation to the claims that were disclaimed in that disclaimer; the fundamental proposition, of course, goes to invalidity of both patents. Now that, of course, is the purpose of it, and as I understand it, the same contention was offered when this matter was raised before Your Honor in a preliminary way, and Your Honor ruled that the defense was open, at least in a preliminary way, and I want to add to this testimony which I do conceive is testimony directed to invalidity.

[fol. 458] The Court: Well, where there is a matter so hazy, we don't feel certain enough about it to exclude testimony, so overrule the objection. Take a recess. Announce a recess of ten minutes.

(Recess, ten minutes.)

The Court: You may proceed.

Mr. Kingsland: Have you the question, Mr. McDermott?

The Witness: May I have the last question?

(Question No. 41 was repeated by the reporter, as follows: "Now, Mr. McDermott, I would like you to compare directly claims that were retained in the Freeman original patent after the disclaimer, but which claims are for subject matter not definitely distinguishable from the other claims disclaimed. I am asking you to take the claims, the definition of structure, and then to point out your reasons for your answer that may be given to this question.")

Mr. Allen: Are you looking for the original patent, Your Honor?

The Court: Well, it was filed with the original petition—reply?

Mr. Allen: I think we handed you up one.

A. One of the claims disclaimed from the Freeman original patent, is 7, which reads as follows:

Mr. Allen: (Interrupting) Now may I ask this: the [fol. 459] witness is now discussing nothing that has to do with patent No. 20,202, is he? A. No.

Mr. Allen: I thought the question was related to that patent.

Mr. Kingsland: No, I think you misunderstood, Mr. Allen. What I have asked the witness to do is to compare directly the claims that were retained by Freeman after the disclosure, but which claims are for subject matter not definitely distinguishable from other claims disclaimed. In other words, that goes to the basic question of what was retained in the reissue—I mean, retained in the patent as a result of the disclaimer.

Mr. Allen: Well, I wonder what reissue patent—No. 20,203?

Mr. Kingsland: No. We are speaking of the original patent. Your disclaimer came before your reissue, and this is directed to claims in the original patent.

Mr. Allen: Well, there is no use getting in a long controversy on reissue application, whether filed before the disclaimer.

Mr. Kingsland: The record shows that.

The Witness: Continuing my answer:

“For use in a machine for cutting designs, in shoe [fol. 460] uppers, the combination including movable die supporting means, a cutting die with upstanding cutting edges mounted thereon, said die and supporting means constructed and arranged to support flatwise

without buckling a portion of a shoe upper in which a design is to be cut with another portion of the upper draped about a lateral side of said die and support, and guiding means on said support arranged to co-operate with a guide on a supporting bed whereby the die and support may be guided from a work placing to work operating position."

Mr. Allen: Original claim which is disclaimed.

The Witness: When claim 7 was disclaimed, claim 9 remained in the Freeman Patent, original Freeman Patent. This claim reads as follows:

"A cut-out machine for operating upon boot and shoe uppers, having cutting means and movable work supporting means constructed to support a portion of a closed upper to be cut and to protect a portion of said upper not to be cut."

Mr. Allen: Now, if the Court please, we are going to get sadly mixed up. Claim 9 does not appear in either of the reissues.

Mr. Rogers: That is right.

[fol. 461] Mr. Allen: I think he should state. Forensic on something that is not involved at all.

Mr. Kingsland: I do not believe that Mr. Allen has our theory on that, and I may say that this is [ture,] that where a claim remains after disclaimer, it is not definitely distinguishable from a claim disclaimed, that fact alone, under the law, invalidates the entire patent from the date of that disclaimer. That is the Maytag decision. In other words, the purpose of this is to go to the original source and determine whether or not there is any validity in the original patent as a result of what we contend is an abortive disclaimer, and that is founded directly on the Maytag case.

Mr. Allen: Well, I simply do not want to interfere, if the Court, I think, has stated his reasons for hearing the witness' testimony. I just do not want to be prejudiced on the record by not making timely objections, and that is all.

The Court: All right. Your objection may go to all of the testimony. It may be so understood.

Mr. Allen: All right.

The Witness: Excluding the title of the claim, claim 7 contains six elements, while claim 9 contains four of these elements, the sole distinguishing feature of claim 7 [fol. 462] over claim 9 is the guide and guarding means by means of which the work support referred to in claim 9 is moved or is made movable. For this reason, it is my opinion that claim 9 is not definitely distinguishable from claim 7.

Q. 42. Can you express an opinion as to which of the two of these claims 7 and 9 is the broader?

A. Claim 9, definitely so. Claim 79 of the original Freeman Patent was disclaimed. Claim 19 was retained. Claim 19 now appearing as claim 7 of reissue No. 20,202, but during the period between the disclaimer and the issuance of the Reissue Patent No. 20,202, claim 19 was retained in the original Freeman Patent. Claim 79 of the original patent recited:

"In combination, a cutting die provided with upwardly extending cutting edges, and a holddown plate provided with one or more apertures to admit the cutting edges of the die, said holddown plate being pivotally attached to the die adjacent to one extremity of the holddown plate."

Referring to Plaintiffs' Exhibit No. 13, in this case Claim 79 defines the cutting die provided with upwardly extending cutting edges, a holddown plate provided with [fol. 463] one or more apertures to admit the cutting edge of the die, said holddown plate being pivotally attached to the die adjacent to one extremity of the holddown plate. Claim 19 recites:

"A support for shoe upper material and a clamping member cooperating therewith constructed and arranged to provide a preliminary yielding engagement permitting adjustment of the material, and subsequently a firm holding engagement therewith."

As I view these two claims and the operation of the Freeman anvil die, when this holddown plate is dropped down upon the work, its—

Q. 43. (Interrupting) You are referring to—

A. Plaintiffs' Exhibit No. 13. Its weight is sufficient to provide sufficient tension when the operator shifts the work thereunder to hold it firmly in the position of—temporarily in the position to which the work has been adjusted, permitting the operator then to place his hand on the front edge of the holddown plate and provide the firm holding engagement. In my opinion, claim 19 is not definitely distinguishable from claim 79, in that all the function attributed to the clamping member recited in claim 19 is inherent in the holddown plate recited in [fol. 464] claim 79.

At the date of the Freeman disclaimer, on or about November 4, 1936, the Freeman Patent contained ninety-four claims, minus the disclaimed claims 6, 7, 8, 10 to 17, inclusive, 62, 65, to 69, inclusive, 71 to 74, inclusive 79 and 94—

Mr. Allen: (Interrupting) Now, just a moment, Mr. Witness. You made some statements about dates of papers and about the Freeman Patent. I would like to have the testimony of the witness at least disregarded on those points. It is in the record now. It should be stricken, because we have the documents here, certified copies, which show what took place in the Patent Office, and incorrect statement of the date ought not to be in the record.

Mr. Kingsland: Well, you can check it.

Mr. Allen: Show the Freeman Patent was surrendered to the United States Patent Office in October, 1936, or early November.

The Witness: It is my understanding that Mr. Allen's last remark it not called for, in that the Freeman Patent was not surrendered at the date he stated, but on the date the reissues were granted. My testimony is directed to the Freeman Patent while it was still a live patent, [fol. 465] namely, from the date of the disclaimer to the date the reissue patents were granted, whereupon the

original Freeman Patent was surrendered. During that period substantially from the date of the disclaimer to the date of the issuance of the reissue patents, Freeman retained claims 1, 9, 24, 25, 26, 28, 29, 30, 31, 32, 33, 38, 43, 45, 47 to 52, inclusive, 54 to 60 inclusive, 75, 86, 89, to 93, inclusive. I do not propose to attempt to show that all these last group of claims that I referred to, none of which were carried over into any of the reissue patents, are definitely indistinguishable from the [disclaimed] claims, except to refer to the Court of Appeals' decision for the First Circuit and point out that the Court referred to the Newton Patent in the following language, page 426:

"The Newton machine patented in 1922 (on an application filed in 1920) is described as 'a machine for perforating vamps', and the patent further says: 'In the manufacture of boots and shoes, it is usual to ornament certain parts of the upper by punching designs therein by means of a gang punch. When it is desired so to use a pattern punch to ornament some [fol. 466] shoe parts, as the toe portion of a vamp on (or) a wing tip', and so forth. It further says:

"With this object in view, there is provided in the illustrated machines, in combination, a cutting block, a perforating die for ornamenting a vamp and a vamp support connected to the die and movable with respect to the cutting block to carry the vamp from a vamp position to a vamp perforating position."

Page 1, line 55 et seq. Later on, in referring to the distinguishing element that Freeman asserted over the disclosure in the Newton Patent, the Court of Appeals said that the idea of a die which is held on a central support around which an upper may be draped was fully and completely anticipated by the patent of Wright. The patent granted June 5, 1894, No. 521,068.

Referring now to claim 1 of the original Freeman Patent, the only distinguishing feature recited therein over the patent to Newton is the recitation:

"constructed and arranged to provide a substantial space along lateral sides of the work supporting means

and ornamenting means sufficiently large to admit thereto at least one hand to hold the work."

[fol. 467] The patent to Wright discloses a construction in which the work support provides these recesses or spaces, and it is, therefore, my opinion that claim 1 of the Freeman reissue Patent is not definitely distinguishable from the disclaimed claims.

Q. 44. Now, Mr. McDermott, in order to give the record continuity, at this point I would like to introduce in evidence a book of patents that will be referred to, and some of which were particularly analyzed by the Court of Appeals. I have included all of the prior art to which attention need be given in this book, and I may say that it is somewhat reduced over that pleaded.

Mr. Allen: Well, it is changed over that pleaded.

Mr. Kingsland: Reduced with respect to that pleaded.

Mr. Allen: You mean the same patents pleaded, only fewer of them?

Mr. Kingsland: There are some of the patents put in simply to show the state of the art.

Mr. Allen: In other words, not to—

Mr. Kingsland: (Interrupting) Not to anticipate, of course.

Mr. Allen: Well, they are pleaded in—

Mr. Rogers: (Interrupting) We pleaded certain claims were invalid over the Freeman versus Premier case, and [fol. 468] this is part of the Freeman versus Premier case, and I don't see but why—

The Witness: (Interrupting) It is all in the Freeman versus Premier case.

Mr. Allen: If the Court please, do I understand here counsel is contending that because the Freeman versus Premier record is in evidence here that therefore, the exhibits attached to that record and the statements of

all witnesses made in that record are to be taken as true of this case?

Mr. Rogers: Not at all.

Mr. Allen: Then I don't see how you can refer to the Premier record.

Mr. Rogers: The thing is, the Freeman versus Premier case was pleaded.

Mr. Allen: Well, if you want to put it in, put it in.

Mr. Rogers: I don't care to put in the record. I am talking about the physical record at the moment. The answer pleaded, so far as that is concerned, that the claims were unpatentable over the claims that were held invalid, such as in the Freeman versus Premier case; therefore, it seems to me like that particular part is the part that was in the Freeman.

Mr. Allen: The only reason for asking the question is [fol. 469] because I just did not want to consent to the introduction of a group of patents of which I haven't any knowledge of what the number is or what their application is to this issue, without making a timely objection, that is all. Well, my objection will be made, if you will kindly just repeat the numbers of the patents in that book.

Mr. Kingsland: That is what I will do. I would like to introduce in evidence as Defendants' Exhibit K, a book of patents comprising the prior art relied on, and included within the book are:

Patent to Cotton, No. 320,228;
The Patent to McGenness, et al., No. 390,384;
The Patent to Wright, No. 521,068;
The patent to Leavitt, No. 620,659;
the patent to Osswald, No. 772,113;
the patent to Knight, No. 783,403;
the patent to Allen, No. 902,545;
the patent to Mayo, No. 1,174,750;
patent to Schwalbach, No. 1,313,596;

patent to Stanbon, No. 1,430,710;

patent to Whitecomb, No. 1,430,710;

patent to Lautenschlager, No. 1,434,060;

patent to Newton, No. 1,439,019;

patent to Knight, No. 1,448,751;

[fol. 470] patent to Furber, No. 1,475,181;

patent to Newman, No. 1,522,533.

(The said book of prior art patents was marked by the reporter as Defendants' Exhibit K.)

Part of Defendants' Exhibit K.

(Letters Patent No. 320,228 to C. L. Cotton, June 16, 1885.)

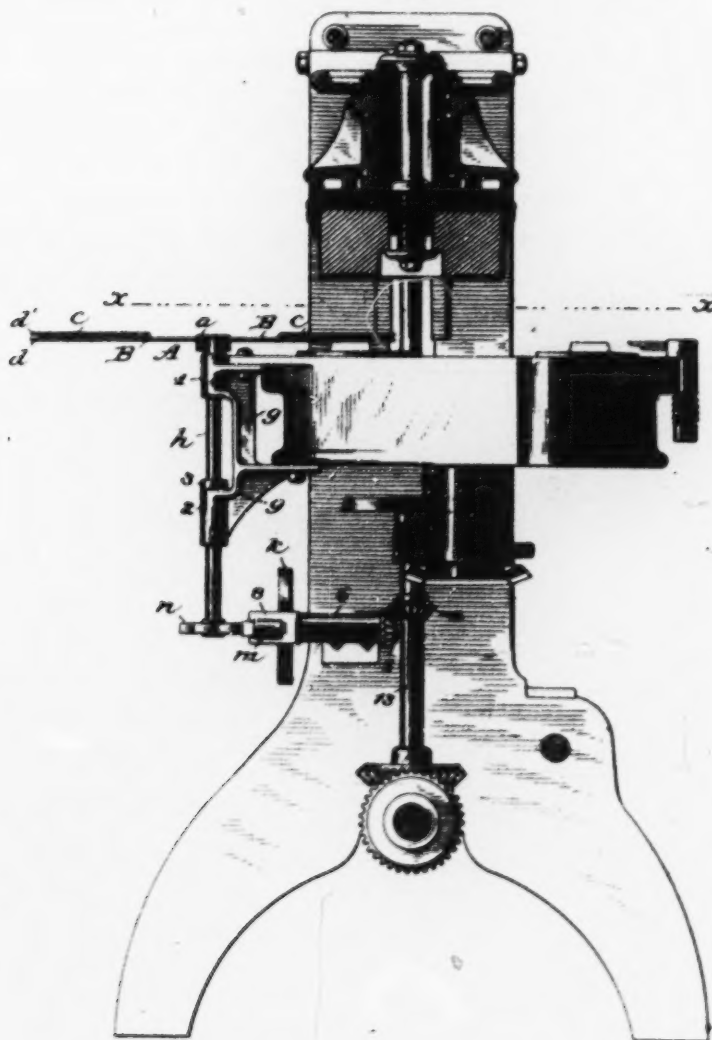
C. L. COTTON.

MACHINE FOR FORMING HEEL BLANKS.

No. 320,228.

Patented June 16, 1885.

Fig. 1.



Attest:

Walter Baldwin
J. L. Middleton

Inventor
Chas. L. Cotton
by J. J. Cooper
Atty.

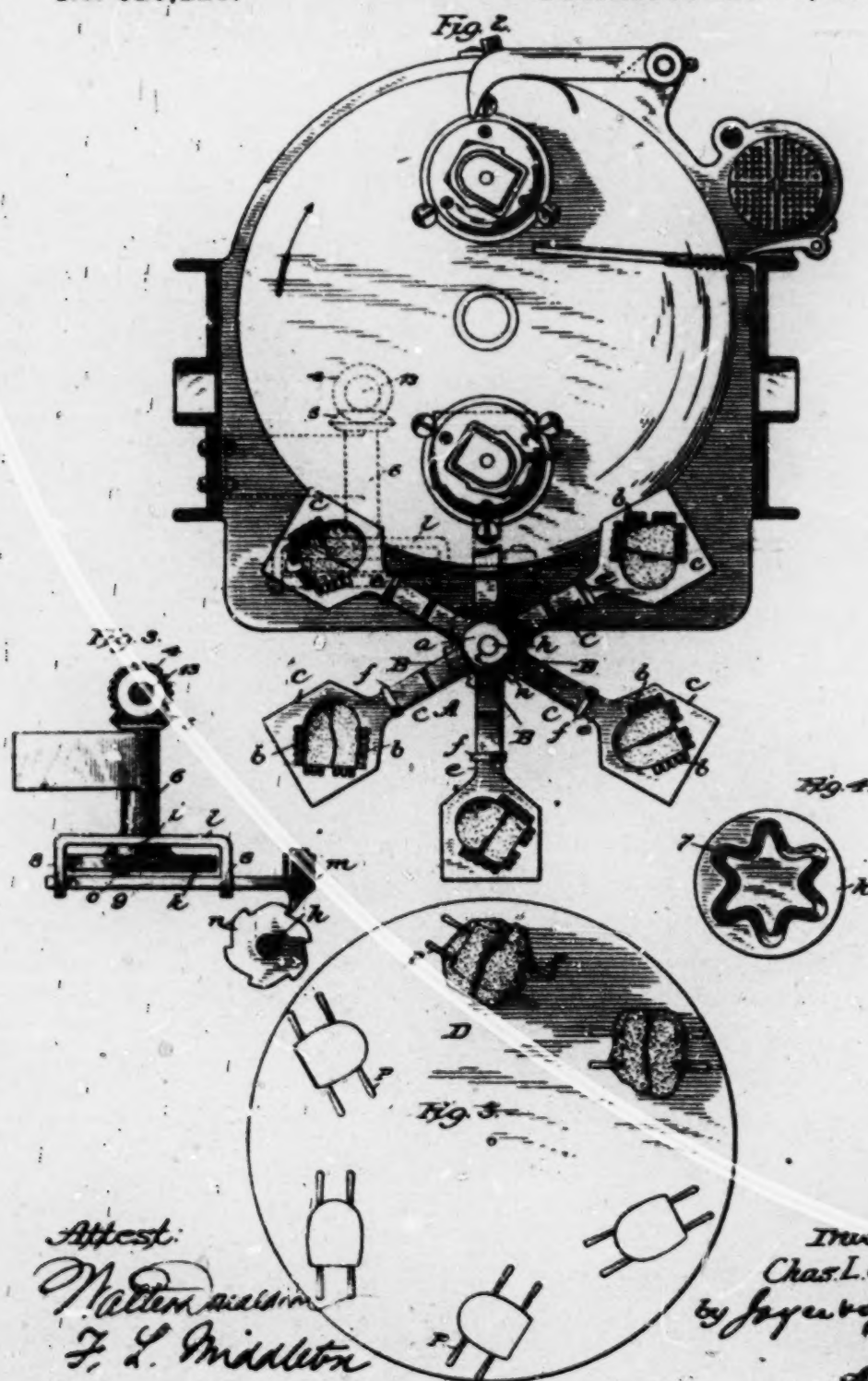
605

C. L. COTTON.

MACHINE FOR FORMING HEEL BLANKS.

No. 320,228.

Patented June 16, 1885.



Attest:
Matteson
F. L. Middleton

Inventor
Chas. L. Cotton
by J. J. & J. J.
attys.

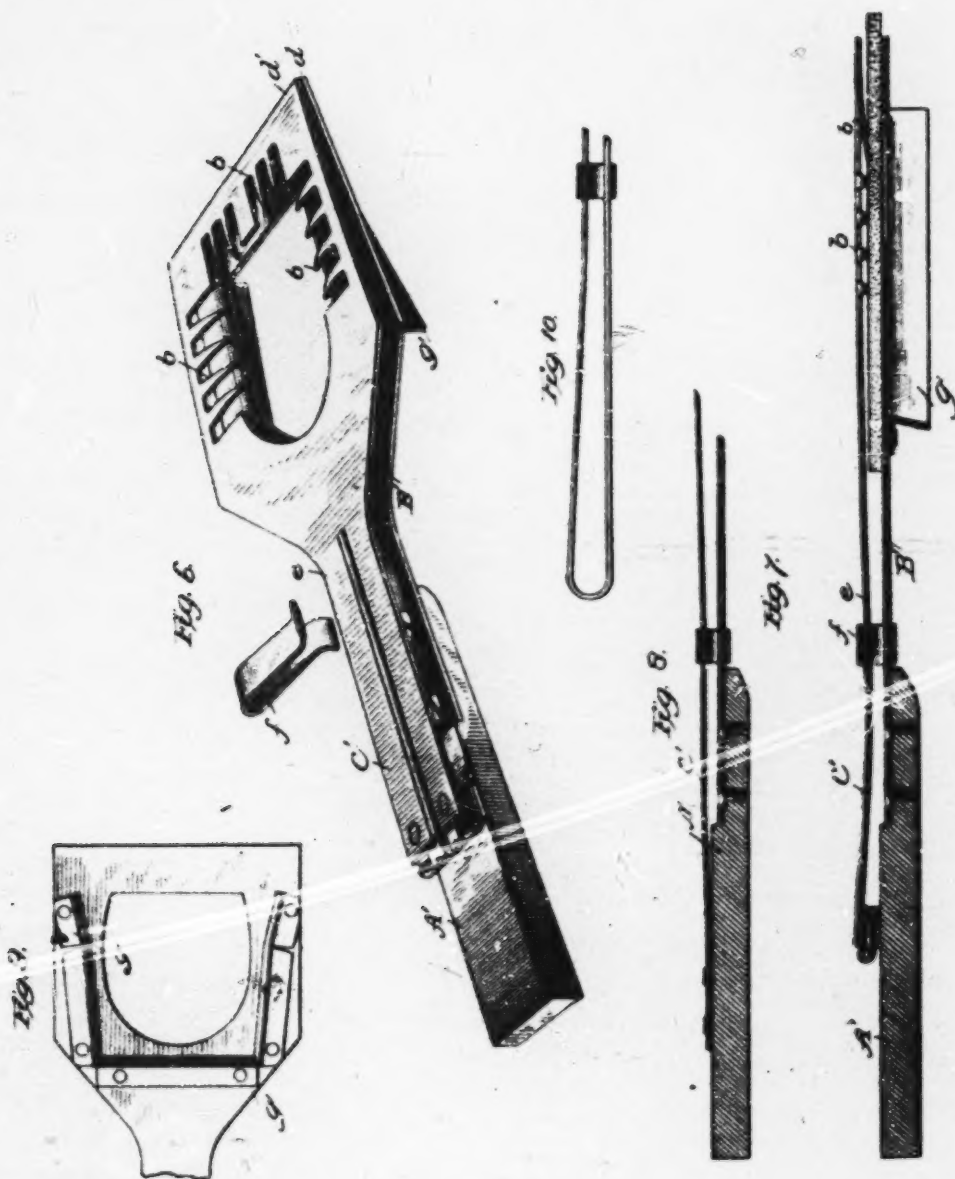
607

C. L. COTTON.

MACHINE FOR FORMING HEEL BLANKS.

No. 320,228.

Patented June 16, 1885.



Attest:
Walter Donaldson
 F. L. Middleton

Inventor
 Chas. L. Cotton.
 by *J. W. Spear*
 atty.

UNITED STATES PATENT OFFICE.

CHARLES LEONARD COTTON, OF CHELSEA, MASSACHUSETTS, ASSIGNOR TO
THE MANSSELL HEEL MACHINE COMPANY, OF SAME PLACE.

MACHINE FOR FORMING HEEL-BLANKS.

SPECIFICATION forming part of Letters Patent No. 320,223, dated June 16, 1885.

Application filed November 2, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES LEONARD COTTON, of Chelsea, in the county of Suffolk and State of Massachusetts, have invented a
5 new and useful Improvement in Manufacture of Heel-Blanks; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to the manufacture of
10 heel-blanks, and is designed to be used in connection with the heel-making machine shown in Letters Patent No. 297,437, granted to Edward H. Parks, and also with the machine shown in an application of F. W. Coy, filed in
15 the United States Patent Office on the 26th day of November, 1884.

My invention consists of devices and combinations of devices, hereinafter particularly described, to be used in connection with a die and
20 block of a heel-machine for cutting lifts and forming heel-blanks.

In the machines above referred to the lifts are cut out in succession by a die and block, and are accumulated in the die to form the
25 blank. When the lifts are cut from pieces capable of forming one or more complete lifts, the pieces may be introduced by hand when the block is lifted, and may be placed upon the end of the die to be pressed upon by the
30 block which forces the lift into the die; but it is desirable in the manufacture of heel-blanks to use small scraps and pieces of leather not large enough taken separately to form a lift. It is impracticable to place these upon the die
35 by hand; and the object of my invention is to provide means whereby such pieces and scraps may be held together and upon the die, in order that the lift may be cut therefrom and pressed into the die.

In the accompanying drawings, Figure 1 represents the Parks machine with the block in section and the bed in side elevation with my attachment in position, partly in section. Fig. 2 is a plan view of the bed with the frame of
40 the machine in section on the line *s s* of Fig. 1. Figs. 3 and 4 represent details of the connecting and operating parts between the machine proper and my attachment. Fig. 5 is a modification adapted to be substituted for the

arms shown in Figs. 1 and 2. Figs. 6, 7, 8, 9, 50 and 10 represent the device adapted to be used by hand.

The machine represented in the drawings is in all essential respects similar to that shown in the Parks patent heretofore referred to, and
55 the general construction need not be herein described, except so far as pertains directly to and is necessary to an understanding of the present invention.

My attachment is shown in Figs. 1 and 2 at
60 A. It is composed of a central hub, *a*, with radiating arms B, six being shown, though any suitable number may be used. Each of the arms has an enlargement at the outer end, as shown, and, being alike in all respects, it is
65 deemed sufficient to describe one only. In the enlarged portion *c* of the arm is formed an opening in the shape of the die, which cuts the blanks but a trifle larger, so that it will fit over the edge of the die. A plate, *C*, is hinged
70 to the arm B, as shown in Figs. 1 and 2, or secured in any other suitable manner. This plate is in shape similar to the arm B, and has an aperture corresponding to the aperture of
75 B. This plate, however, is made of thinner metal and is elastic. It turns back in opening toward the hub *a* and leaves the arm B uncovered at its outer end. In order that it may more securely hold the pieces of leather,
80 I cut the edges of the plate *C* to form teeth *b*, the points of which are bent downward to press upon the leather. The plates are preferably formed so that the edges *d* and *e* touch first when the plates are brought together, and the
85 neck *c* of the plate *C* is sprung down to the arm B, to which it is held by a spring-clasp, *f*. This constitutes my attachment, and it is connected to the machine in the following
90 manner: Secured to the front of the table is a bracket, *g*, having arms 1, 2, in which a vertical shaft, *A*, has its bearings, being held in position by a fixed collar, 3. This shaft *A* has a cone-shaped point adapted to a corresponding bearing in the hub *a*, and when in position the
95 arms *A* is in line with the surface of the die. The shaft *A* carries a ratchet-wheel, *a*, upon its lower end, with a number of teeth correspond-

ing to the number of arms radiating from the hub or to the number of leather-holding devices. This ratchet-wheel, shaft, and hub are operated by connections with the driving-power of the machine as follows: A vertical shaft, 13, (shown in Fig. 1, and common to the Parks machine,) has connection with the main shaft through bevel gears. A bevel-gear, 4, is keyed to this shaft, as shown, and this meshes with and communicates motion to a bevel-gear, 5, on a shaft, 6, which has its bearings in a sleeve, 8, secured to the side of the frame. This arrangement is shown in Fig. 3. Upon the outer end of the shaft 6 is a wheel, 2, having a cam-groove, 7, as shown in Fig. 4, which groove, like the ratchet-wheel, has six high points, and this must likewise correspond with the number of leather-holding devices. Secured to the sleeve 8 is a bracket, 1, having arms 3-3 bent at right angles to the body and extending beyond the surface of the wheel 2. These arms are slotted to receive the extension 9 of a pawl, m. This pawl is fitted to the ends of the extension 3, with a spring encircling it within the barrel or case, so as to allow it to slide over the teeth of the ratchet-wheel. At a suitable point on the inner face of the extension 9 is a pin, with a roller, a, attached thereto and adapted to the cam-groove 7 in the wheel 2. By the revolution of this wheel the extension 9 and its pawl are moved back and forth successively, and this motion is transmitted by the pawl to the ratchet-wheel 2 and its shaft to the leather-holding device.

In the operation of the device the attendant first removes the device A from its cone-bearing and fills it with the pieces of leather by raising the plate C, and placing the pieces in position on the bottom plate over the aperture, taking care to bring the edges together. The plate C is then brought down and clamped in place. All the arms are thus filled in the same, it being only necessary that care should be taken in having the line of junction of the pieces run in opposite directions in the holders of adjoining arms, in order to break the joint which would be otherwise formed in the heel-blank. As the reciprocating block moves up the empty holder is removed and the newly-filled holder slipped in its place, with one of the arms immediately over the die. As the block descends this lift is cut, and by the time the block has again moved upward and down the mechanism described has moved the holder through the shaft A another step, and has brought another arm over the die, and so on.

In Fig. 5 I have shown a modification of my leather-holding device, in this case using a single disk of metal, as shown at D, instead of the arms in Figs. 1 and 2. Apertures are made in this disk at suitable intervals, and upon each side of these apertures are spring-fingers p, p, which are secured to the disk, but have elasticity enough to allow the pieces of leather to be inserted beneath them, as shown, so that the pieces may be held securely in po-

sition. The operation with this modification, it will be obvious, is precisely the same as before described.

In case it should be desired to dispense with the automatic feed, I have provided an instrument for hand use. (Shown in Figs. 6 and 7, with modifications in Figs. 8, 9, and 10.) The device shown in Figs. 6 and 7 is similar in all essential respects to one of the arms shown in Figs. 1 and 2. It is provided, however, with a wooden handle, A', and the lower plate, B', is attached to this, as shown, and the plate C' hinged thereto. Instead of this construction, however—and this change may extend to the automatic feeder as well—I may, as shown in Fig. 8, secure the end of the plate C' rigidly to the handle A', and make it of such elastic metal that this plate may be raised sufficiently to admit of the insertion of the pieces of leather beneath it; or, as shown in Fig. 10, the wooden handle may be dispensed with, and the two parts composed wholly of metal and connected by a metal handle.

In order to adapt the instrument for use with the machine in which the die is raised above the table, I fix upon the under side of the lower plate guide-flanges g', adapted to guide the instrument to the die, and thus facilitate the work, as it enables the attendant to use the instrument with great rapidity.

I do not limit myself to the precise form of the holder, as it may be varied greatly without departing from the general form requisite to clamp the pieces of leather and hold them upon the die.

Having thus described my invention, what I claim as new is—

1. In the manufacture of heel-blanks, a holder for the pieces of leather from which the lifts are to be cut, consisting of a plate or support, substantially as described, for the leather, an aperture therein corresponding to the shape of the lift, and suitable clamping means for holding the leather upon the supporting-plate and over said aperture, combined with a cutting-die and block, substantially as described.

2. An attachment for presenting pieces of leather to the cutting-die and block of a heel-machine, consisting of a series of holders for the pieces of leather provided at suitable intervals with apertures conforming to the shape of the lift to be cut, suitable clamping means, and means, substantially as described, adapted to move the holder intermittently to bring each aperture successively over the cutting-die, whereby the lifts are cut from the pieces of leather clamped over such apertures and the heel-blank formed therefrom, substantially as is described.

3. An attachment for applying pieces of leather to the cutting-die and block of a heel-machine, consisting of a holder having arms radiating from a central hub, an aperture conforming to the shape of the lift to be cut in the end of each of said arms, clamping devices

thereon for holding the pieces of leather, and means, substantially as described, adapted to move the holder intermittently to bring the aperture in each arm successively to the cutting-die, substantially as described.

4. An attachment for applying pieces of leather to the cutting-die and block of a heel-machine, consisting of a holder with arms radiating from a central hub, each arm being composed of a part, B, and a clamp, C, and both having an aperture conforming to the shape of the lift to be cut, the pieces of leather being held between the parts, and means, substantially as described, adapted to move the arms successively to the cutting-die, substantially as described.

5. An attachment for applying pieces of leather to the cutting-die and block of a heel-machine, consisting of a revolving holder for

the pieces of leather provided at suitable intervals with apertures conforming to the shape of the lift to be cut, suitable clamps for holding the leather over such apertures, and mechanism for moving the holder intermittently, consisting of a shaft, k, to which the holder is connected, a ratchet-wheel, n, on said shaft, and a pawl mechanism adapted to operate the ratchet n through power derived from the driving-shaft of the heel-machine, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES LEONARD COTTON.

Witnesses:

C. E. MUDGE,

CHARLES E. STEARNS.

612

Part of Defendants' Exhibit K.

(Letters Patent No. 390,384 to M. C. McGenness &
J. Tweedie, October 2, 1888.)

M. C. McGENNESS & J. TWEEDIE.

BREASTING ATTACHMENT FOR HEELING MACHINES.

No. 390,384.

Patented Oct. 2, 1888.

Fig. 1.

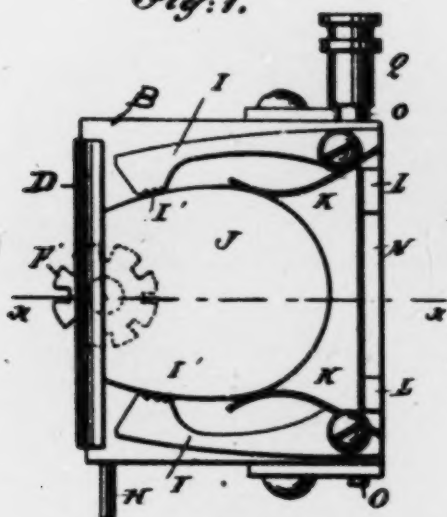


Fig. 2.

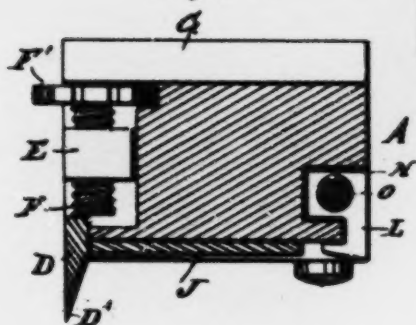


Fig. 3.

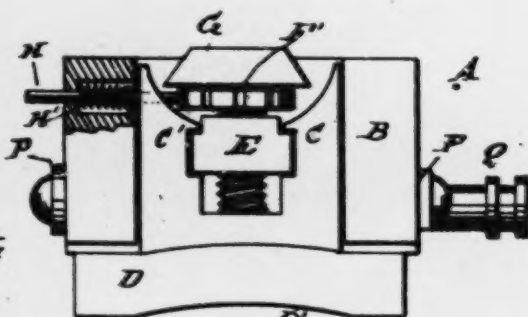


Fig. 4.

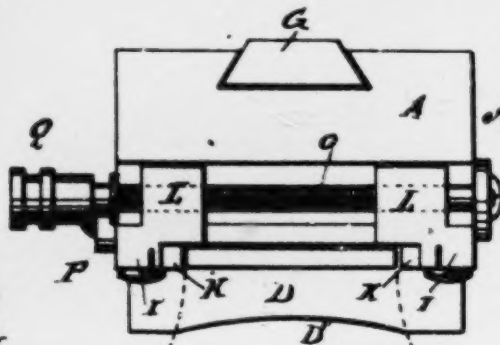


Fig. 5.

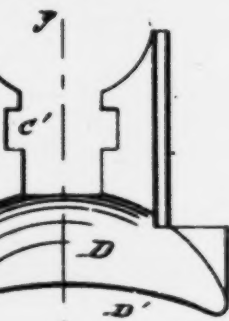
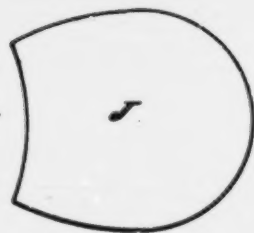
Fig. 6.



Fig. 6.



Fig. 7.



WITNESSES:

Wm. H. H. H.
Wm. H. H. H.

INVENTOR

M. C. McGenness
J. Tweedie
M. C. McGenness

ATTORNEY

616 (No Model.)

2 Sheets—Sheet 2.

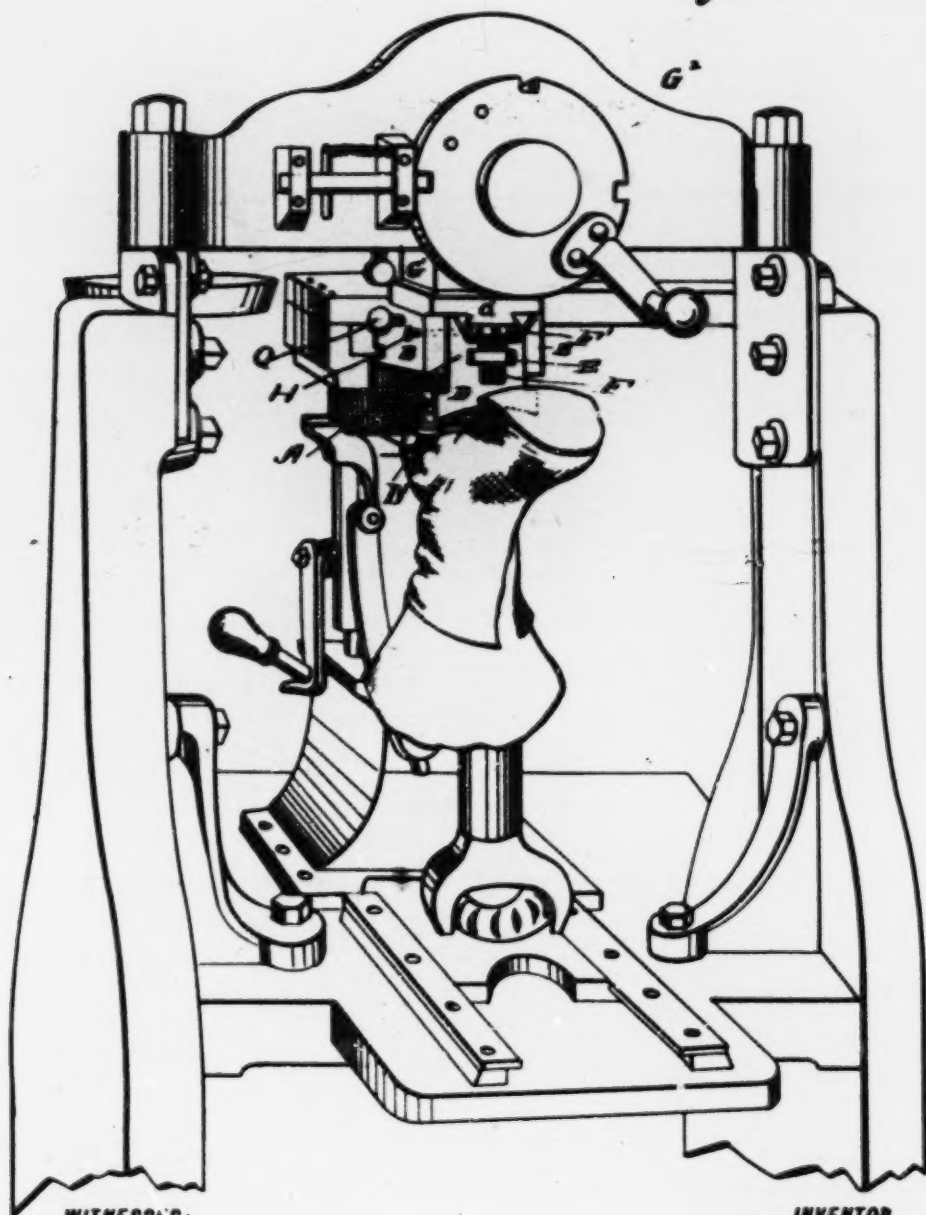
M. C. McGENNESS & J. TWEEDIE.

BREASTING ATTACHMENT FOR HEELING MACHINES.

No. 390,384.

Patented Oct. 2, 1888.

Fig. 9.



WITNESSES:

Chas. Nida
C. Sedgwick

INVENTOR

M. C. McGenness
J. Tweedie
Munn & Co.

BY

ATTORNEY

UNITED STATES PATENT OFFICE. 617

MARTIN CHARLES MCGENNESS AND JOHN TWEEDIE, OF JEFFERSON CITY, MISSOURI; SAID MCGENNESS ASSIGNOR TO AUGUST PRIESMEYER, OF SAME PLACE.

BREASTING ATTACHMENT FOR HEELING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 390,384, dated October 2, 1888.

Application filed February 8, 1888. Serial No. 953,375. (No model.)

To all whom it may concern:

Be it known that we, MARTIN CHARLES MCGENNESS and JOHN TWEEDIE, of Jefferson City, in the county of Cole and State of Missouri, have invented a new and Improved Breastling Attachment for Boot and Shoe Heeling Machines, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved breastling attachment for boot and shoe heeling machines, by which the boot and shoe heels are breastled and the top piece of the heel is put in place at the same time without danger of cutting the sole.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is an inverted plan view of the improvement. Fig. 2 is a sectional side elevation of the same on the line $x-x$ of Fig. 1. Fig. 3 is an elevation of one end of the improvement with parts in section. Fig. 4 is a like view of the other end. Fig. 5 is a face view of a modified form of the knife. Fig. 6 is a sectional elevation of the same on the line $y-y$ of Fig. 5. Fig. 7 is a plan view of the same. Fig. 8 is a plan view of the top plate of the heel, and Fig. 9 is a perspective view of the improvement as in use upon a heel-machine.

The improvement is provided with a block, A, secured to the follower of a heeling-machine of any approved construction. At the inner end of the block A is formed a dovetailed groove, B, in which is held to slide vertically a dovetailed plate, C, carrying at its lower end a knife, D, for trimming the inner edge of the shoe or boot heel. The knife D may be straight across the face, as shown in Figs. 1, 2, 3, and 4, or it may be curved for trimming the inner edge of the heel round, as illustrated in Figs. 5, 6, 7, and 8. The cutting-edge D' of the knife D is slightly curved, so as to conform to the shape of the curved sole of the boot or shoe.

In the plate C, carrying the knife D, is

formed a recess, C', in which is held a nut, E, in which is entered a screw-rod, F, provided at its upper end with a notched disk, F'. The top of the block A is provided with a dovetail groove, A', and is fitted to slide upon a dovetail projection, G, formed on the body portion G' of the heel-machine G', as shown in Fig. 9. The notches in the disk F' are engaged by a rod, H, having its bearings in one side of the block A and extending to the outside, so as to enable the operator to take hold of the said rod H and pull it in and out of contact with the notches of the said disk F. The spring H' is coiled on the rod H, and serves to press the rod H inward into contact with one of the notches of the disk F' whenever the operator releases his hold on the said rod H. The latter serves to lock the disk F' and the screw-rod F in position after the knife D is adjusted to a desirable height or depth.

On the bottom of the block A are held the gripping-fingers I I, placed opposite each other, as illustrated in Fig. 1, and each being provided at its inner end with a serrated edge, I', adapted to engage the rim of the top plate, J, to be secured to the heel of the boot or shoe. To the gripping-fingers I are secured the springs K, which also rest against the rim of the said top plate, J. The inner end of the latter rests against the back of the knife D, as shown in Fig. 1. On the outer end of each gripping-finger I is secured an upwardly-extending lug, L, adapted to slide transversely in a suitable slot, N, formed in the block A.

One of the lugs L is provided with a left-hand screw-threaded aperture, and the other lug is provided with a right-hand screw-threaded aperture. Through the said two apertures of the lugs L L passes a right and left handed screw-rod, O, adapted to turn in suitable bearings, P, fastened to the sides of the block A. On one outer end of the screw-rod O is secured a milled head, Q, for turning the said screw-rod O.

The operation is as follows: The knife D is adjusted vertically by disengaging the rod H from the notched disk F', after which the operator turns the said notched disk F', whereby the screw-rod F, engaging the nut E, raises or lowers the plate C, carrying the knife D, until

the latter attains such a position that the height from the cutting-edge D' to the bottom of the block A is equal to the height of the boot or shoe heel to be cut or trimmed. The operator then places the top plate, J, of the boot or shoe heel to be formed on the top of the block A, so that it rests between the gripping-fingers I-I, after which the operator turns the milled head Q of the screw-rod O, so that the latter moves the lugs L-L' inward simultaneously, whereby the serrated ends I' of the gripping-fingers I come in contact with the rim of the top plate, J, thus holding the latter firmly in place in the middle of the block A. The springs K-K also press against the outer part of the rim of the top plate, J, as shown in Fig. 1. The heeling-machine is now set in motion in the usual manner, whereby the cutting-edge D' of the knife D trims the inner edge of the heel, at the same time preming the top plate, J, on the top of that part of the heel already secured to the boot or shoe by the heeling-machine.

It will be seen that the top plate, J, gradually guides the heel of the boot or shoe so that the cutting-edge of the knife D trims the inner edge of the heel very accurately, and at the same time the knife D is prevented from cutting into the sole, as the cutting of the knife D is limited in its inward movement by the bottom of the block A and the corresponding height to which the knife D has been adjusted in relation to the said bottom of the block A.

The knife D can be easily changed to any of the various forms by removing the nut E and the screw-rod F and then pulling the knife D upward so that its dovetailed plate disengages the correspondingly-shaped recess R of the block A. Another knife can then be inserted with its plate C in a dovetailed groove, R, after which the nut E and the screw-rod F are again put in position.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

1. In a breasting attachment for heeling-machines, the combination herein described, with a block, of a knife held to slide vertically in one end of the said block, a nut held on the said knife, and a screw-rod engaging the said nut and adapted for raising and lowering the said knife, substantially as shown and described.

2. In a breasting attachment for heeling-machines, the combination herein described, with a block, of a knife having a dovetailed plate held to slide in one end of the said block, a nut secured in a recess of the said plate, a screw-rod screwing on the said nut, and a disk formed on the said screw-rod and resting on a support formed on the said block, substantially as shown and described.

3. In a breasting attachment for heeling-machines, the combination herein described, with a block, of a knife provided with a plate held to slide vertically at one end of the said block, a nut held in the said plate, a screw-rod screwing in the said nut, a notched disk formed at one end of the said screw-rod and resting on a support of the said block, and a spring-pin adapted to engage the notches of the said disk, substantially as shown and described.

4. In a breasting attachment for heeling-machines, the combination herein described, with a block, A, and top plate, J, of gripping-fingers held to slide on the bottom of the said block, substantially as shown and described.

5. In a breasting attachment for heeling-machines, the combination herein described, with a block, of a knife held vertically adjustable at one end of the said block and gripping-fingers held to slide on the bottom of the said block, substantially as shown and described.

6. In a breasting attachment for heeling-machines, the combination herein described, with a block, of gripping-fingers held to slide on the bottom of the said block and adapted to engage the bottom plate of the heel, lugs formed on the said gripping-fingers and held to slide transversely on the said block, and a right and left handed screw engaging the lugs on the gripping-fingers, substantially as shown and described.

7. In a breasting attachment for heeling-machines, the combination herein described, with a block, of gripping-fingers held to slide on the bottom of the said block and adapted to engage the bottom plate of the heel, lugs formed on the said gripping-fingers and held to slide transversely on the said block, a right and left handed screw engaging the said lugs on the gripping-fingers, and springs secured to the said gripping-fingers and adapted to engage the rim of the bottom plate of the heel, substantially as shown and described.

8. In a breasting attachment for heeling-machines, the combination herein described, with a block, of a knife held to slide vertically at one end of the said block, a screw-rod engaging a nut on the said knife for adjusting the latter vertically, gripping-fingers held on top of the said block and provided with threaded lugs, and a right and left handed screw-rod screwing in the said lugs, for adjusting the said gripping-fingers, substantially as shown and described.

MARTIN CHARLES McGENNESS.
JOHN TWEEDIE.

Witnesses:

JOHN F. FULKERSON,
A. B. KELLY.

Part of Defendants' Exhibit K.

(Letters Patent No. 521,068 to H. Wright, June 5, 1894.)

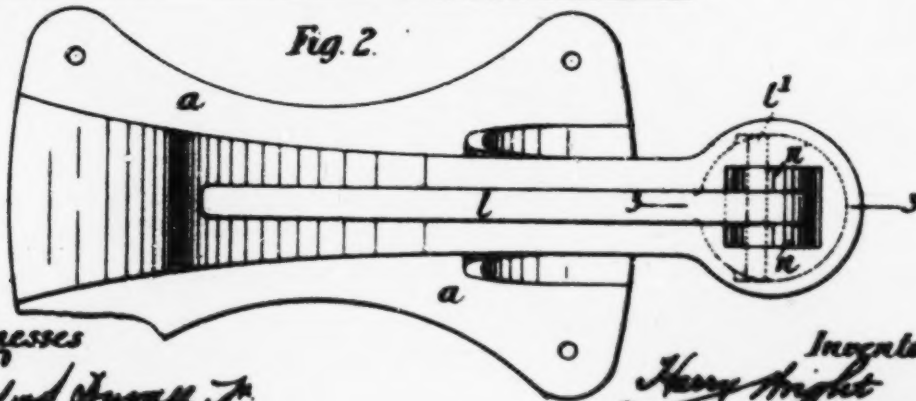
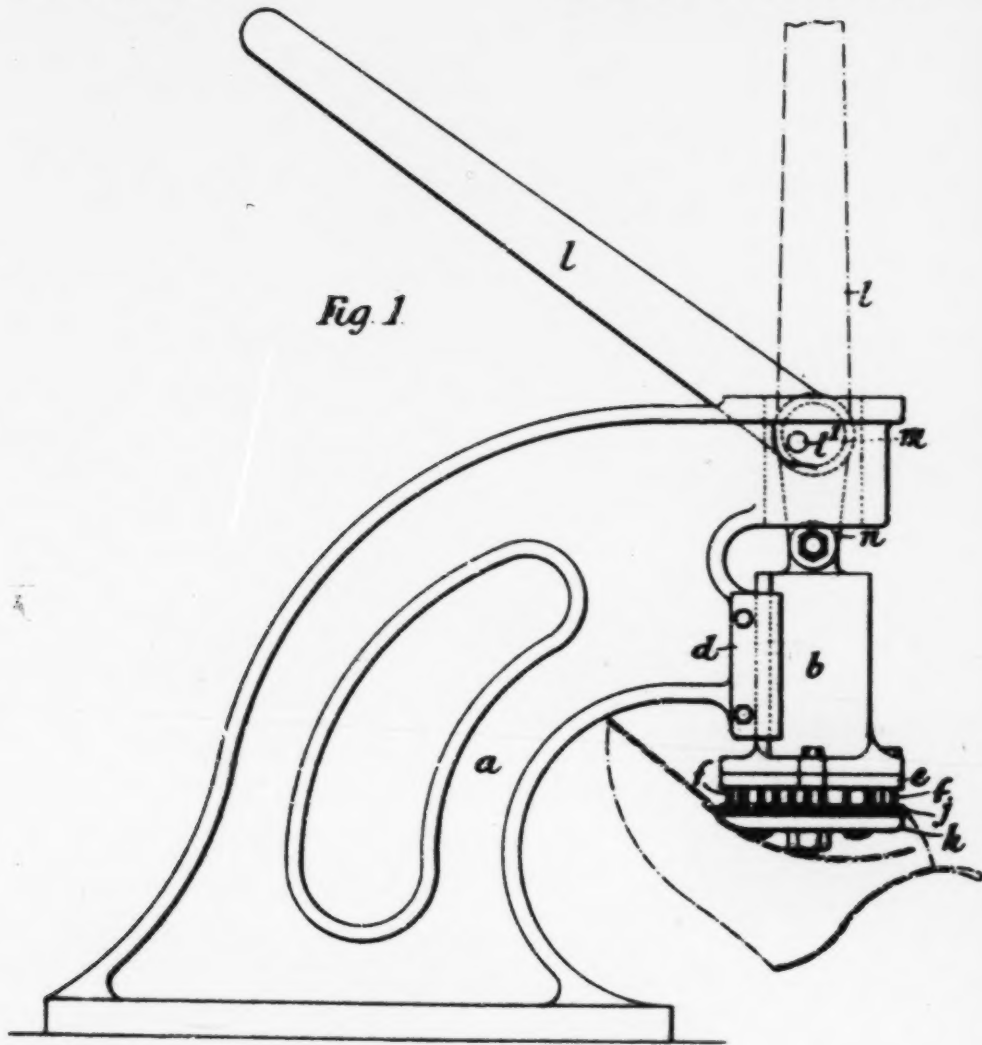
(No Model.)

3 Sheets—Sheet 1.

H. WRIGHT.
EYELET HOLE PUNCHING MACHINE.

No. 521.068.

Patented June 5, 1894.



Witnesses

Charles J. Jones, Jr.
Frank B. Rhodes

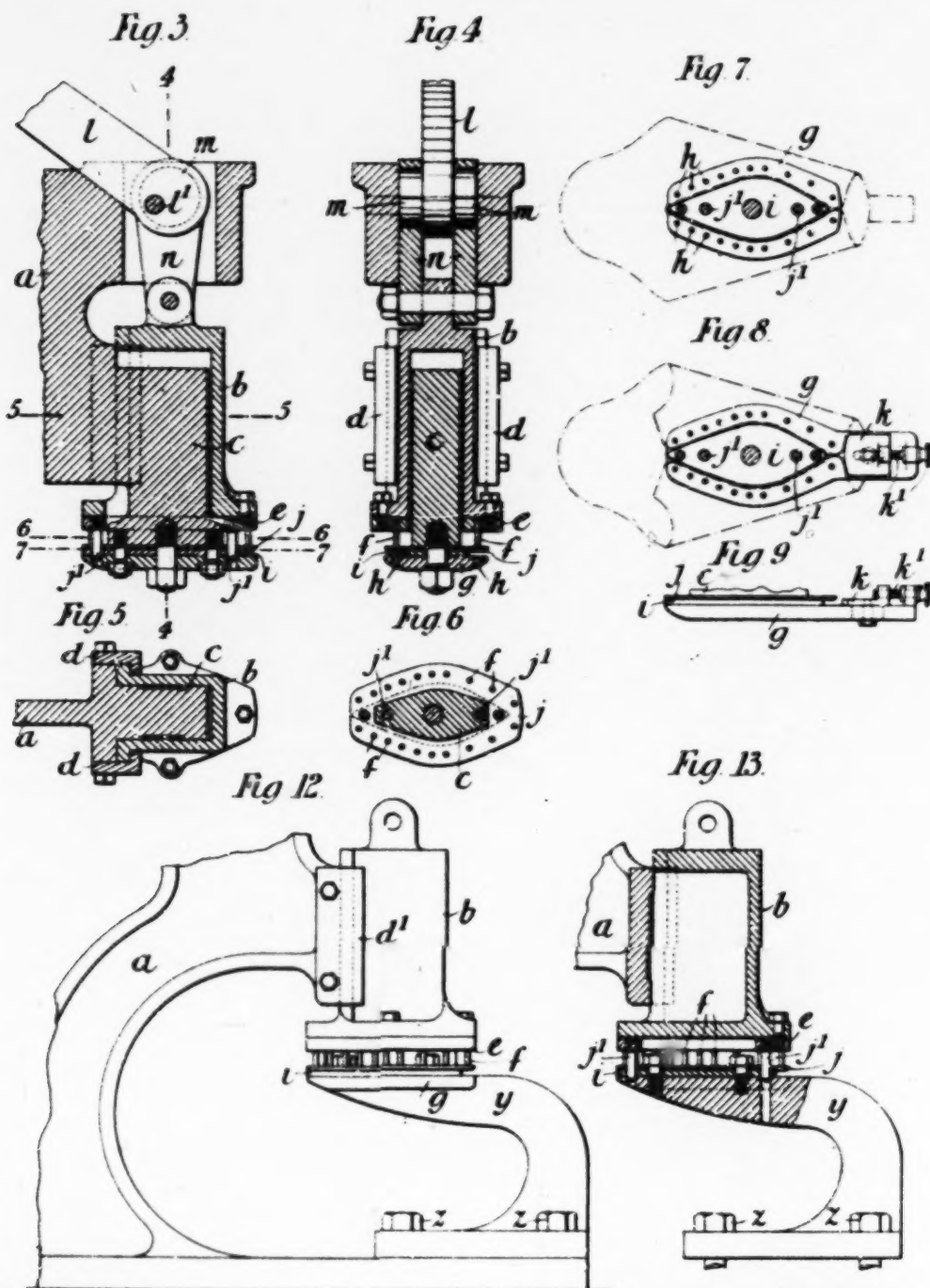
Inventor

Harry Wright
by Charles B. Jones

H. WRIGHT.
EYELET HOLE PUNCHING MACHINE.

No. 521,068.

Patented June 5, 1894.



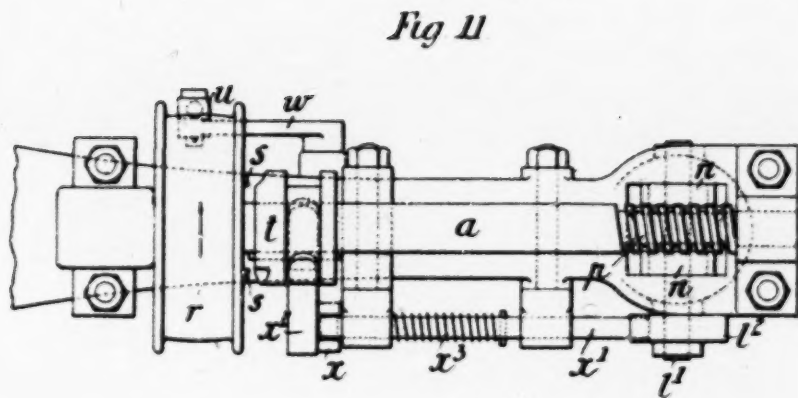
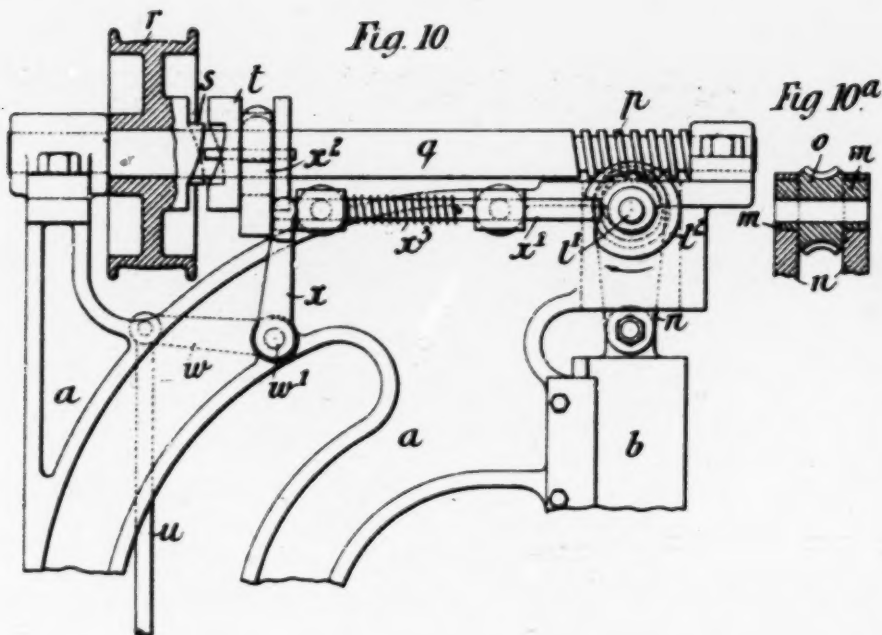
Witnesses
Edw. S. Duvall Jr.
Fred B. Rhodes

Inventor
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Atty.

H. WRIGHT.
EYELET HOLE PUNCHING MACHINE.

No. 521,068.

Patented June 5, 1894.



Witnesses

Edw. C. Envall Jr.
Fred. B. Rhodes

Inventor:

Harry Wright
By Samuel B. Brock
Atty.

HARRY WRIGHT, OF KETTERING, ENGLAND.

EYELET-HOLE-PUNCHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 521,068, dated June 5, 1894.

Application filed December 20, 1892. Serial No. 455,815. (No model.) Patented in England August 18, 1892, No. 14,944, and in Germany December 13, 1892, No. 69,648.

To all whom it may concern:

Be it known that I, HARRY WRIGHT, a subject of the Queen of Great Britain, residing at Kettering, England, have invented new and useful Improvements in and Relating to the Punching of Eyelet-Holes in Boots and Shoes, (patented in Great Britain, No. 14,944, dated August 18, 1892, and in Germany, No. 69,648, dated December 13, 1892,) of which the following is a specification.

My invention relates to the punching of eyelet holes in boots and shoes.

Hitherto the eyelet holes of boots and shoes have generally been punched separately but in some cases each side of the upper has been punched separately but always before the upper is closed.

According to my invention I punch all the eyelet holes at one operation and after the upper is complete, whereby I effect a great economy of time and produce a better finished article.

In carrying out my invention I employ a punching head carrying a number of punches corresponding with the number of eyelet holes to be punched. This punching head is adapted to slide on a guide in the frame of a press, the lower end of such guide carrying the under die. In connection with the under die is a gage adapted to fit the throat of the leg or upper to be perforated.

In some cases instead of suspending the under die as above described, I employ a horn-shaped under die fixed to the bed of the press; in which arrangement the punching head is carried and operated in the ordinary manner.

To enable my invention to be fully understood I will describe the same by reference to the accompanying drawings, in which—

Figure 1 is a side elevation of a hand-power machine constructed according to my invention; and Fig. 2 is a plan of the same. Fig. 3 is a section on the line 3—3, Fig. 2; and Figs. 4, 5, 6 and 7 are sections on the lines 4—4, 5—5, 6—6 and 7—7 respectively of Fig. 3. Fig. 8 is a view similar to Fig. 7 illustrating a slight modification of my invention; and Fig. 9 is a side view of the same. Figs. 10 and 11 are a sectional side elevation and a plan showing the arrangement of mechanism for driving my machine by steam or other

power through the medium of a belt; and Fig. 10^a is a detail of the worm-wheel shown in Figs. 10 and 11. Figs. 12 and 13 are a side elevation and a sectional view illustrating the arrangement wherein the under die is carried by the bed of the press.

Similar letters of reference indicate corresponding parts in all the figures.

a is the frame of the machine, and *b* is the punching head which slides upon the guide *c* formed upon the frame *a*, being held in position thereon by means of the strips *d, d*, Figs. 1 and 3, and which carries at its lower end a removable plate *e* to which the punches *f, f* are secured.

g is the under die which has formed in it perforations *h, h* corresponding to the punches *f, f* and which is firmly fixed to the under side of the guide *c*, as clearly shown in Figs. 3 and 4.

i is the gage for the material to be perforated, and *j* is a plate perforated in a similar manner to the under die *h* and adapted to steady the punches as they enter the work placed upon the under die so that the said punches will correspond with the holes *h, h* in the said under die. Additional guide-pins *j', j'* are sometimes employed to further steady the punches. This gage *i* and plate *j* are arranged between the under die *g* and the guide *c* as clearly shown.

In practice I find it advantageous to make the punches of slightly varying length, as shown in Fig. 4, so that the power required to work the machine will be less than if all the punches came down upon the material simultaneously.

In using my machine the upper to be perforated is introduced into the space between the under die *g* and the plate *j*, the throat of the said upper being drawn tightly around the gage *i*, as clearly shown in Fig. 7, the punching head *b* is then depressed so that the punches *f, f* perforate the upper.

In perforating what are known as Derby uppers, that is to say, uppers of the kind in which the tongue forms a continuation of the vamp of the upper, it is necessary to provide for adjusting the position of the upper relatively to the gage *i* as there is no point or V in the throat as in a Balmoral upper which

can be pulled against the gage *i*. This I accomplish by extending the die-plate *g*, as shown in Figs. 8 and 9, and mounting upon the extension a gage *k* adapted to be adjusted by a screw *k'* and against which the top of the upper is drawn, as shown clearly in Fig. 8, where the dotted lines represent an upper of the kind referred to.

The up-and-down-movement of the punching head may be effected by any desirable means. As shown in Figs. 1, 2, 3 and 4 the said punching head is represented as being operated by a hand-lever *l* pivoted upon a pin *l'* and provided at each side with an eccentric *m*, connected by a link *n* with the punching head *b*, as shown most clearly in Figs. 3 and 4. It is obvious with this arrangement that when the said lever is moved from the position shown in full lines in Fig. 1 to the position indicated by the dotted lines in the said figure, the punching head will be depressed sufficiently to cause the punches to perforate the material upon the under die.

When my machine is to be operated through the medium of a driving belt, I advantageously provide the arrangement of mechanism shown in Figs. 10 and 11. In this arrangement the punching head *b* is connected by links *n*, *n* with eccentrics *m*, *m* upon a pin *l'* as in the arrangement last described: the said eccentrics *m*, *m* in this case, however, are secured or formed integral with a worm-wheel *o*, as shown in Fig. 10^a, with which a worm *p* on one end of a shaft *q* mounted in bearings upon the framing *a* engages: upon the other end of the shaft *q* is loosely mounted a pulley *r* having clutch-teeth *s* upon its boss with which the teeth of a clutch-box *t* (also mounted on the shaft *q* and sliding thereon) are adapted to engage. This clutch-box *t* is operated to move it into engagement with the clutch-teeth *s* by means of a foot-lever or treadle connected by a rod *u* with a lever *w* fixed to one end of a shaft *w'*, a bifurcated lever *x* being secured to the other end of the said shaft *w'* and with its arms embracing a sliding shaft *x'* and bearing against a fork *x''* attached to the said shaft *x* and engaging with a groove in the clutch-box *t*. With this arrangement it will be readily understood that when the foot-lever is depressed so as to force the clutch-box *t* into engagement with the clutch-teeth *s* the shaft *q* with its worm *p* will be rotated, whereby rotary motion will also be imparted to the worm-wheel *o* and to the eccentrics *m* which in this case make complete rotations instead of being oscillated as is the case in the arrangement described with reference to Figs. 1 to 9.

In order that after the foot-lever has been depressed to cause the engagement of the clutch-box *t* with the clutch-teeth *s* the said clutch-box shall remain in engagement with the said teeth until the worm-wheel has made a complete revolution without the necessity for the operator keeping his foot upon the treadle, I provide on the shaft *l'* a cam *l''* which

acts against one end of the rod *x'*. Normally the said rod *x'* bears against the lowest part of the cam *l''*: as soon, however, as the gear-wheel *o* commences to rotate the said cam also rotates and acts upon the rod *x'* to push the fork *x''* to hold the clutch-box into engagement with the clutch-teeth *s* until the cam has made a complete revolution when, under the action of a spring *x''* upon the rod *x'*, the said rod is moved back into the depression on the cam so as to allow the clutch-box *t* to be moved out of engagement with the said clutch-teeth.

In Figs. 12 and 13 which show the arrangement wherein the under die *g* is supported from beneath *y* indicates an arm upon which the said die is directly carried, the said arm being secured to the frame *a* by means of bolts *z*, *z*.

Although in the foregoing description I have referred to the punches as being arranged above the die-plate it is to be understood that this arrangement may be reversed, that is to say, that the die-plate may be uppermost and the punching head moved up to it from beneath.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. The combination in a machine for punching eyelets in boots and shoes, of two dies one of which carries two lines of punches for punching all the eyelets in a complete upper at one operation, a gage interposed between said lines of punches and mechanism for operating the dies.

2. In a machine for punching all the eyelet holes in a complete upper at one operation, the combination of a fixed perforated die, a movable die carrying punches and a gage fixed to the perforated die and adapted to fit the throat of the upper to be perforated or punched, substantially as described.

3. The combination in a machine for punching eyelets in boots and shoes, of two dies, one of which carries two lines of punches for punching all the eyelets in a complete upper at one operation, a gage interposed between said lines of punches a gage disposed at one end of both lines of punches, and mechanism for operating the dies.

4. The combination of two dies, one carrying two lines of punches, a gage interposed between said lines, and an adjustable gage at one end of both lines of punches.

5. The combination with operating mechanism and a stationary die, of a standard having a stationary way or guide, and a die secured to the bottom thereof, a punching head embracing said guide having a die upon the foot thereof above the first mentioned die.

6. In a leather punching machine, the combination of a reciprocating die and head, a cam for operating said head mechanism for driving said cam, another eccentric upon the

same cam-shaft, a drive pulley, a clutch device between said pulley and the driving mechanism, and a clutch operating mechanism interposed between the clutch and the second eccentric for giving an intermittent reciprocating movement to the die-head.

7. The combination of a reciprocating die-head, a cam for moving the same, a worm-wheel upon the cam-shaft, a main driving shaft, a worm, a pulley and a clutch upon said driving shaft, a second cam or eccentric upon the said cam-shaft, a clutch operating device interposed between said second cam and the clutch and operated in one of its movements

by said second cam, and a lever or treadle mechanism for engaging the clutch. 15

8. The combination of a stationary die-head, a die secured thereto, a steadying plate also secured to said head, and a gage interposed between said die and plate, a reciprocating die-head having a die thereon, and mechanism for operating the dies. 20

HARRY WRIGHT.

Witnesses:

G. F. REDFERN,

JOHN E. BOUSFIELD,

Of the firm of G. F. Redfern & Co., 4 South Street, Finsbury, London, Patent Agents.

Part of Defendants' Exhibit K.

**(Letter Patent No. 620,659 to F. M. Leavitt,
March 7, 1899.)**

No. 620,659.

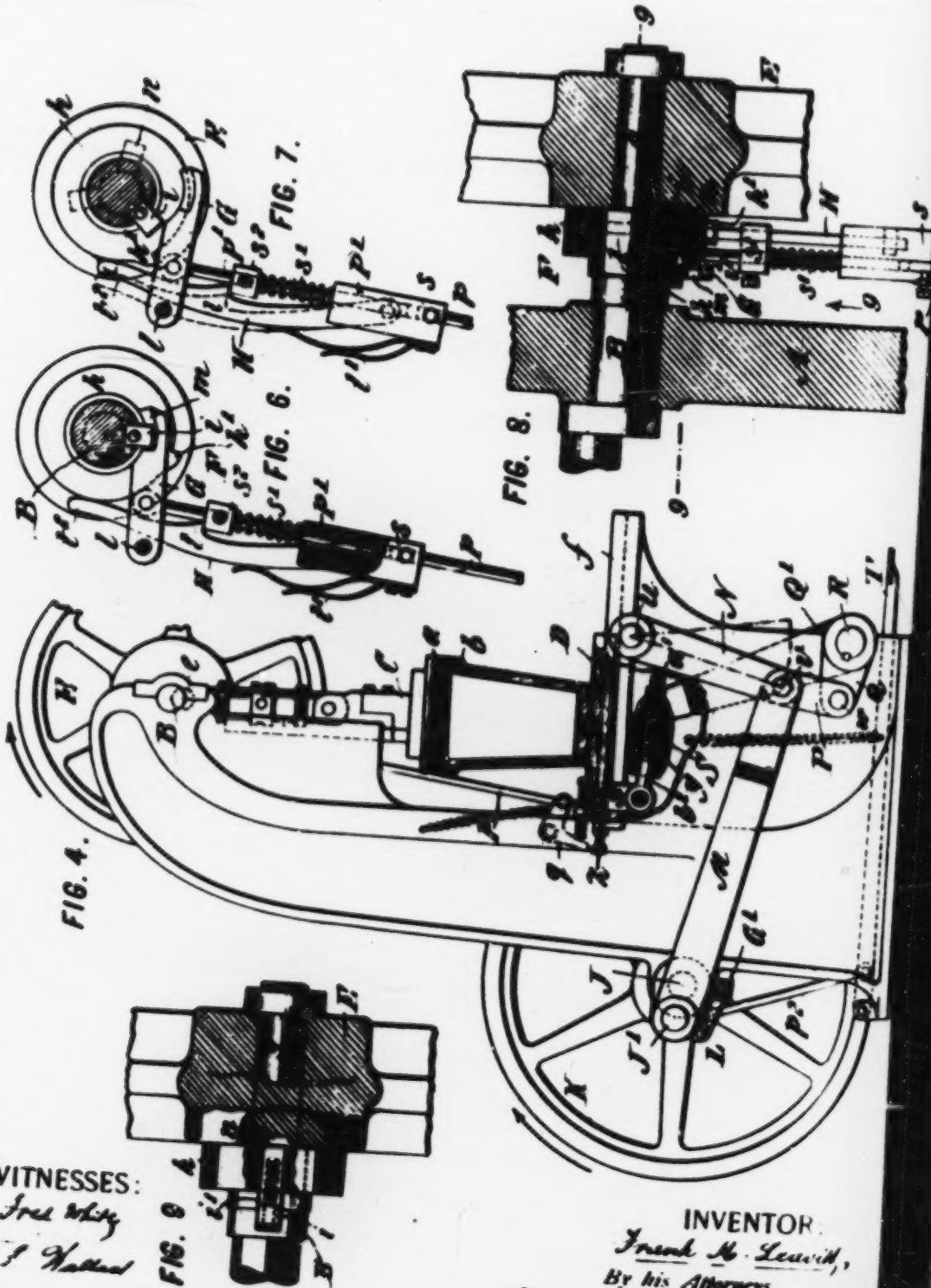
F. M. LEAVITT.
PRESS FOR WORKING SHEET METAL.

Patented Mar. 7, 1899.

(No Model.)

(Application filed Apr. 18, 1898.)

3 Sheets—Sheet 3.



WITNESSES:

Frederick White
J. S. Hall

FIG. 9

INVENTOR.

Frederick M. Leavitt,
By his Attorneys.

Arthur C. Orin

No. 620,659.

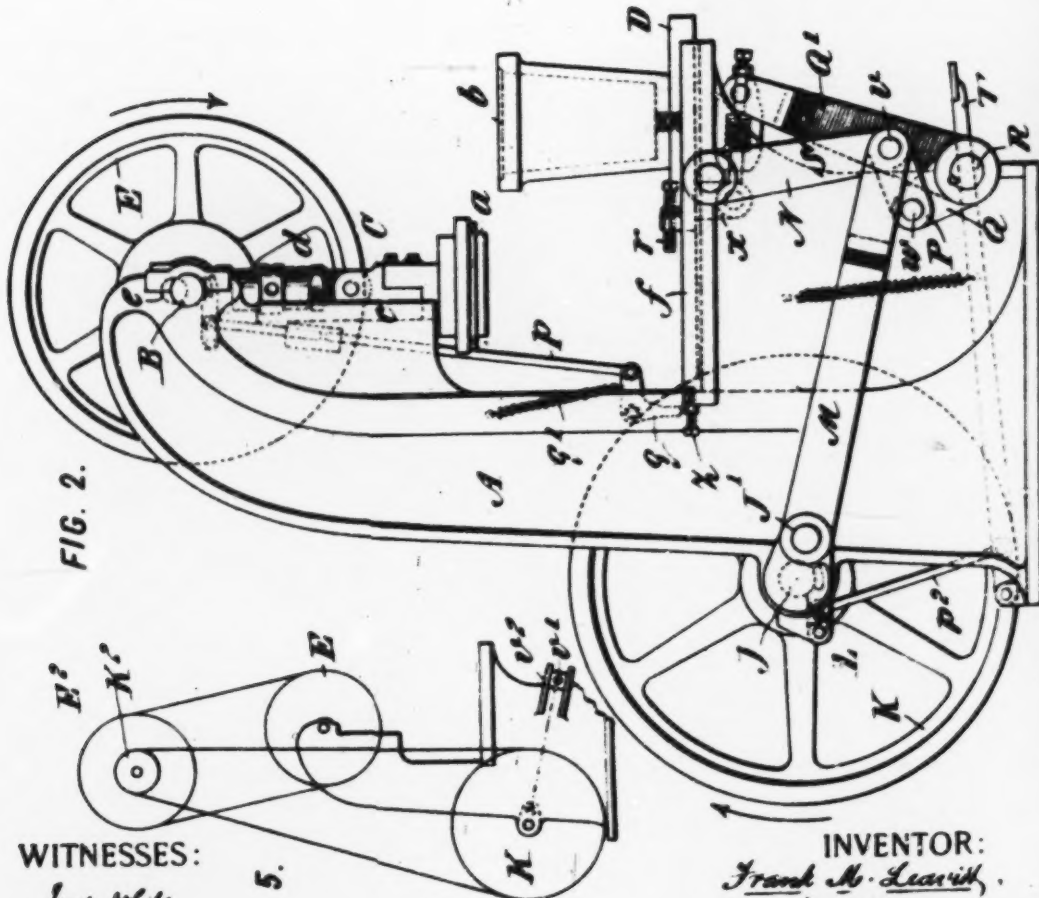
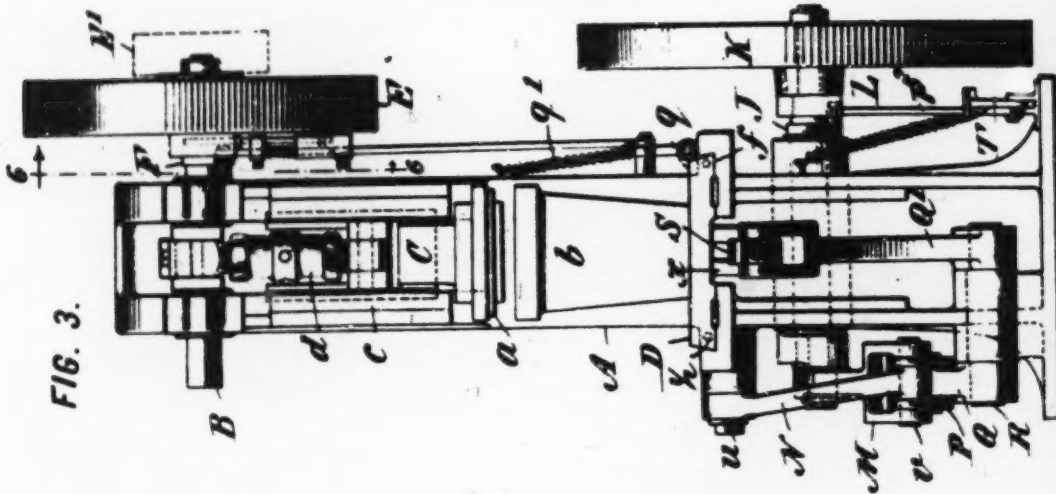
Patented Mar. 7, 1899.

F. M. LEAVITT.
PRESS FOR WORKING SHEET METAL.

(Application filed Apr. 15, 1898.)

(No Model.)

3 Sheets—Sheet 2.



WITNESSES:

John White
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631-632

INVENTOR:

Frank M. Leavitt

By his Attorneys.

Arthur C. Brown & Co.

F. M. LEAVITT.
PRESS FOR WORKING SHEET METAL.

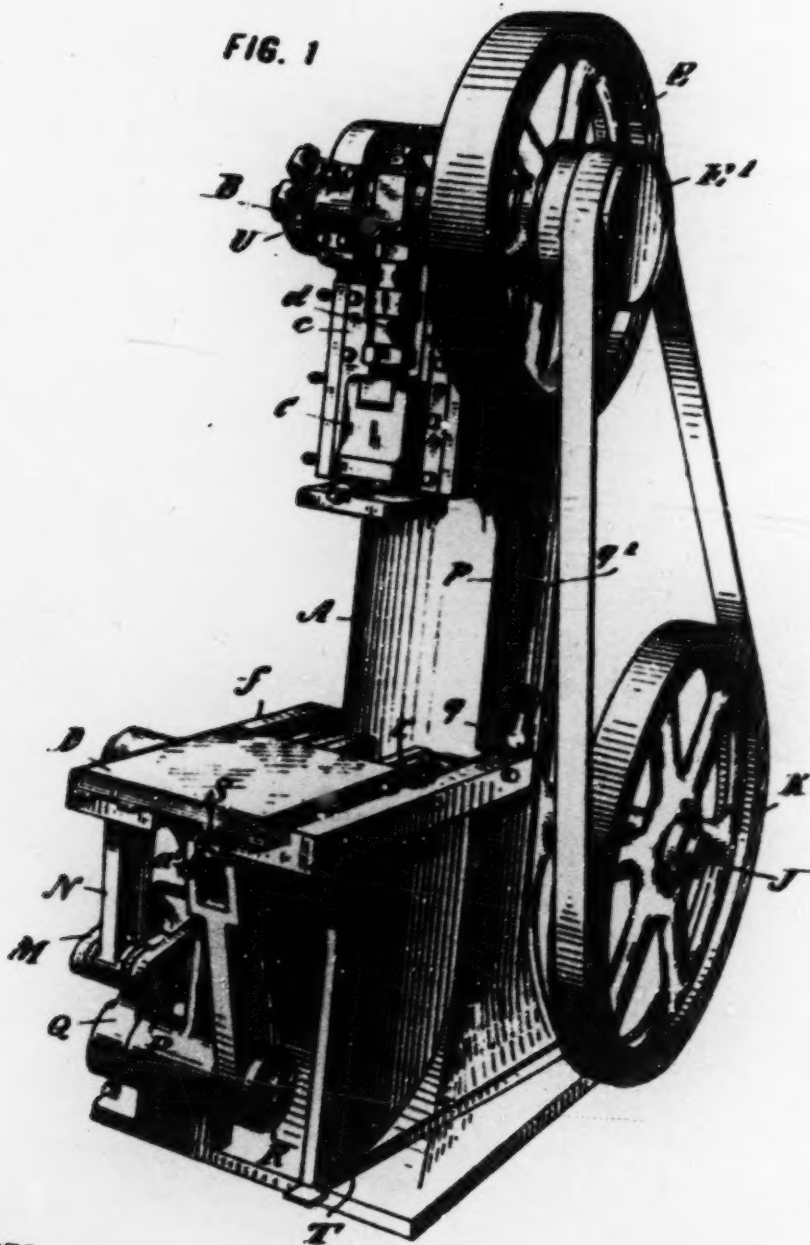
Patented Mar. 7, 1899.

(No Model.)

(Application filed Apr. 14, 1898.)

3 Sheets—Sheet 1.

FIG. 1



WITNESSES:

Frederick W. White
Thomas F. Hutton
633-634

INVENTOR:

Frank M. Leavitt,
By his Attorneys.

Arthur B. Oran & Co.

UNITED STATES PATENT OFFICE.

FRANK M. LEAVITT, OF NEW YORK, N. Y., ASSIGNOR TO THE E. W. BLISS COMPANY, OF SAME PLACE.

PRESS FOR WORKING SHEET METAL.

SPECIFICATION forming part of Letters Patent No. 680,000, dated March 7, 1899.

Application filed April 19, 1898. Serial No. 677,694. (No model.)

To all whom it may concern:

Be it known that I, FRANK M. LEAVITT, a citizen of the United States, residing in New York, (Brooklyn,) in the county of Kings and State of New York, have invented certain new and useful Improvements in Presses for Working Sheet Metal, &c., of which the following is a specification.

This invention relates to presses wherein the bed carrying the lower die is movable from a position under the upper die to a position out of line therewith, in which latter position the operator removes the work and puts in place the new piece of work to be operated on. Such presses are used for stamping, punching, &c., and also for wiring sheet-metal goods—such as coffee-pots, pails, buckets, &c.—where the article to be operated on is of such height that to lift it out of (or off from) the lower die requires that the latter die shall be moved out of line with the upper die in order to avoid the necessity of giving the upper die an excessively long stroke. Hence in such wiring-presses it is customary to mount the lower die upon a sliding bed or table, which after the work is placed on or in the die is pushed forward by the operator until the lower die is brought into alignment with the upper one, whereupon the operator presses the treadle which actuates the usual one-revolution clutch for engaging the normally-revolving driving-pulley with its shaft which works the vertically-sliding head, carrying the upper die, so that this die descends upon the lower die and then rises and stops, whereupon the operator slides back the bed, lifts out or off the work, puts a new piece of work in place, and repeats the operation. Such manual operation of the slide is slow and in large presses becomes seriously laborious. There is also danger that the operator may prematurely release the clutch, so as to bring the upper die down before the lower die has reached its position of exact alignment beneath it, thereby damaging the die or breaking some part of the press. It has been proposed to remedy this difficulty by providing a clutch-lock which prevents the clutch being actuated until the slide carrying the lower die is pushed into the correct position. My invention provides a press

which overcomes this liability and in which the sliding bed is operated automatically, but under the operator's control, so that the operator has only to remove the finished work, apply the new work in its place, and press the lever or treadle which effects the starting of the press.

Figure 1 of the accompanying drawings is a perspective view of my improved press, the die being omitted. Fig. 2 is a side elevation of the press in the position of rest. Fig. 3 is a front elevation thereof. Fig. 4 is a side elevation, partly in section, showing the press in the active position with the die brought together. Fig. 5 is a diagrammatic elevation on a smaller scale, showing the preferred method of bolting. Figs. 6 to 9 are fragmentary views showing the clutch mechanism, which, however, forms no part of my invention, Fig. 6 being an elevation looking in the same direction as Fig. 9 and partly in section on the line 6-6 in Fig. 3, showing the parts at rest, Fig. 7 being a similar elevation showing the position of the parts just after engaging the clutch, Fig. 8 being a vertical mid-section showing the position at the instant of clutch engagement, and Fig. 9 being an under side view looking in the direction of arrow 9 in Fig. 3, partly in section on the line 9-9 therein, and showing the position of the clutch when disengaged.

I will proceed to describe the preferred embodiment of my invention with reference to the accompanying drawings.

Let A designate the main frame of the press, which is constructed or shaped in any usual manner to provide bearings and supports for the working parts. At the upper part of this frame is mounted the operating-shaft B, which works the usual sliding head C, carrying the upper die, of which I have shown one example, (lettered a,) while the lower die b is carried by a sliding bed or table D. The head C slides in vertical ways c c and is connected by an adjustable pitman d to a crank e (or eccentric) on the shaft B. Any known means, however, of operating the head C from the shaft B may be used, this means forming no part of my invention. The sliding bed or table D moves in horizontal ways f, on which it is movable from the position shown in Fig.

2, where the lower die *b* is entirely clear of the upper die to facilitate the removal of the finished work and the placing of the next piece to be operated on, to the position shown in Fig. 4, where the lower die is in alignment with the upper die.

The die-operating shaft *B* is driven, as usual in such presses, from a continuously-revolving pulley *E* through the medium of a one-revolution clutch *F*, so that whenever this clutch is engaged the shaft executes one revolution, moving the upper die from its uppermost position of rest down to its lowermost position and then returning it to its upper position, whereupon the shaft stops and remains stationary until the clutch is again engaged. Numerous clutches of this character are known in the art, any of which may be used in connection with my present invention, and I do not limit myself to the use of any particular clutch; but to facilitate an understanding of the essential operation of the machine I have shown in Figs. 6 to 9 one suitable form of clutch, this being known in the art as the "Johnson" clutch. Referring to these figures, the shaft *B* is concentrically reduced at *g*, on which reduced portion the pulley *E* turns freely, while adjacent to this reduced portion there is fixed on the shaft a collar *h*, within which the shaft is formed on one side with a keyway in which and in a coinciding recess in the collar *h* freely works a bolt *i*, pressed toward the pulley by a spring *j* within it, which reacts through a plunger *k* against the end of the keyway. An operating-lever *G*, pivoted at *l* to the frame, has its free end beveled at *m*, this beveled end normally engaging a notch *i'* in the bolt *i*, as in Fig. 6, holding the bolt pressed back, as shown in Fig. 9, so that as the pulley *E* revolves its notches *n*, of which there are preferably three, pass the end of the bolt without engaging it. When, however, the lever *G* is pulled down, as in Fig. 7, the bolt *i* is pressed by its spring *j* against the pulley-hub, and when the first notch *n* reaches coincidence with it its spring presses it into this notch, and thereby locks the shaft to the pulley during one revolution, at the end of which lever *G*, meanwhile having been restored to its uppermost position, reengages the bolt *i* by its inclined portion *m* entering the notch *i'* in the bolt and acting as a wedge to draw it back. Usually such a clutch is operated by a rod extending from the lever *G* down to a treadle or hand lever. In applying such a clutch in connection with my invention I connect its operating-rod *p* to an elbow lever or tappet *q*, (having a spring *q'* for normally pressing up the rod *p*.) the lower arm of said lever standing in the path of a tappet-screw *r*, carried by the sliding bed *D*, so that when the bed is advanced to the operative position its screw *r* toward the end of its movement strikes the lever *q* and displaces it, thereby pulling down the rod *p*, as shown (to an exaggerated extent) in Fig. 4, and as this rod *p* is connected to the operat-

ing-lever *G* the clutch is engaged in the manner described, and the shaft *B* executes one revolution, causing the upper die *a* to descend against the lower die and reascend. To insure the stoppage of the shaft after this one revolution, since the tappet-lever *q* still remains displaced, it is necessary to introduce a trip device for releasing the clutch, which may be variously constructed; but the construction shown in Figs. 6 to 8 is suitable. Here the rod *p* is fixed at its upper end in a block *s*, in which slides a supplemental rod *p'*, the upper end of which is pivoted to the lever *G*, and which is pressed upward by a spring *s'* reacting against the block *s* and acting against a collar *s''*, so as to press this collar up into firm engagement with a nose or hook *t* on a dog *H*, pivoted in a slot in the block *s*, Fig. 8, and pressed up by a spring or springs *t'*. When the rod *p* is pulled down, it carries the block *s* and dog *H* with it, and consequently also the rod *p'* and lever *G*, pulling the latter down to the position shown in Fig. 7 and engaging the clutch. In the resulting revolution of the shaft *B* a cam *A'* on the collar *h* strikes the upper end *t'* of the dog *H* and throws it off to the position shown in dotted lines in Fig. 7, thereby disengaging its nose *t* from the collar *s''* and releasing the rod *p'*, which instantly is pressed up by its spring *s'*, thereby restoring lever *G* to its normal position, so that upon the end of the revolution of the shaft this lever acts to disengage the clutch. Various trip devices for this purpose are known, and any such device may be substituted for that shown, all that is essential being that the clutch shall be caused to free itself at the end of one revolution, so that a second revolution of the shaft cannot occur, notwithstanding that the clutch-operating detents *r q* are still engaged.

So far as described the sliding bed *D* might be operated by hand, in which case my invention would secure the advantage of guarding against premature engagement of the clutch *F*, such as is liable to occur when the engagement of this clutch depends upon the pressing of a treadle by the operator after he has slid the bed into the active position, since it will occasionally happen that the operator will, through an inadvertent movement, actuate the treadle before the bed is brought into exactly the correct position to insure coincidence of the dies; but according to my complete invention I provide means for automatically operating the bed, as will now be described.

Behind the frame *A* or in any other convenient location is arranged a bed-operating shaft *J*, which by preference is normally stationary and is driven one revolution at a time whenever required by means of a continuously-revolving pulley *K*, turning freely upon it, and to which it is coupled at intervals by a one-revolution clutch *L*. The pulley *K* revolves at a considerably slower rate than the pulley *E*, and with the mechanism shown

their speeds are preferably in the ratio of 1 to 3.4; but the exact ratio is unessential. The clutch L may be of the same construction as the clutch F, already described, and may or may not have the throw-off device consisting of the dog H, auxiliary rod p', cam k', &c., as described. I have shown it as without any such throw-off device, the clutch-operating lever G' in Fig. 4 being connected by a single rod p' to a treadle-lever T, by depressing which the press is started and by releasing which before the end of one revolution of the shaft J the press stops at the end of that revolution. The shaft J is connected through any suitable mechanism with the bed D in such manner that during one revolution of the shaft the bed shall be moved from the position shown in Fig. 2 to that shown in Fig. 4, shall there dwell long enough for the upper die to come down into engagement with the lower die and to reascend clear of the latter, and shall thereupon execute its return motion to the position shown in Fig. 2. Obviously this result could be attained by a cam mechanism; but I have devised a better means for this purpose, which I will describe in detail.

The shaft J is formed with a crank J', which engages a link or connecting-rod M, the opposite end of which is jointed at v to a swinging arm N, pivoted at u to the frame, so that the axis of their joint swings in an arc, as shown by dotted lines in Fig. 4. The arm N is solely for the purpose of guiding the forward end of the rod M and confining it to a path which may be a slight circular arc, as shown, or it might, to equal effect, be a straight line. The joint v, which may be made by means of an ordinary pivot-pin, connects also to a link (or preferably a pair of links) P, the latter being in turn jointed by means of a pivot-pin w or otherwise to a short lever-arm Q, which is fixed on a rock-shaft R or is otherwise pivoted or fulcrumed, while on this same shaft is fixed a long lever-arm Q', the free end of which, being preferably forked, is connected through the medium of a link S with a lug or pair of lugs x, formed on the underside of the sliding bed D. In the starting position shown in Fig. 2 the axis of the link P may more or less approximate parallelism with the path of movement of the pivotal end r of the rod M and stands, preferably, at approximately right angles to the crank Q. As the movement of the crank J' pulls the rod M backward a thrust is exerted through the link P against the lever-arm Q until the position shown in Fig. 4 is reached, at which time the axis of the link P stands approximately at right angles to the path of movement of the pivot r. Obviously at the instant when the axis of P stands exactly at right angles to said path the arm Q comes to rest. The parts are so proportioned, however, that this occurs shortly before the end of the movement of M, so that the final movement carries the link P slightly beyond the right-angle position, as indicated

in Fig. 4. The movement during the near approach to the right-angle position is very slow, and, in fact, almost imperceptible, and the same is true of the movement slightly beyond this position to the extreme point shown in Fig. 4, and likewise of the first portion of the return movement of M, during which the link P rocks to and beyond the right-angle position until a point is reached where the link begins to participate materially in the movement of M, with the result that during these portions of the movement, amounting to approximately twenty-five degrees of the movement of the shaft J preceding and succeeding the position shown in Fig. 4, the lever Q Q' is practically at rest, thereby imparting the requisite dwell to the bed D to afford time for the upper die a to descend into engagement with the lower die and to reascend clear thereof. In other words, assuming that the pivotal end v of the rod M is guided by the swinging arm N, as shown, this arm and the link P constitute together a pair of toggles, which in the initial position shown in Fig. 2 are doubled up and are straightened by the pull of the rod M until they are in alignment and pass slightly beyond alignment, as shown in Fig. 4, so that when near the position of alignment but little motion is communicated by the toggles to the lever Q Q'. The result stated is of course greatly contributed to by the diminishing movement applied to the rod M by the crank J' as the latter approaches its dead-center and recedes therefrom. It thus results from the combination of crank and what is approximately if not essentially a toggle movement that the bed D is rendered substantially immovable during a period or dwell of approximately fifty degrees, or during sufficient time to permit the upper die to act upon the lower one. In fact, however, this condition is not one of absolute immovability, but a very close approach thereto, and to compensate for the slight movement that is engendered I introduce at some part of the mechanism a spring or cushion y, which preferably forms part of the link S, which thus is made a yielding or compressible link, although the spring might be elsewhere introduced to like effect. Thus the bed D is pushed forward through the medium of a yielding spring or cushion until the bed is stopped with the dies in exact alignment by striking an adjustable abutment consisting of screw-stops z, (one or more,) whereupon the slight additional movement imparted to the lever Q Q' is taken up in compression of the spring y. In the construction shown the link S is made with an opening or chamber in which the spring y is housed, the spring being seated at one end against an adjusting-screw a', by which to regulate its tension, and at the other end against the end of a sliding member b' of the link, consisting of a neck sliding through a hole in the main link member and formed with an eye which engages the pivot-pin connecting it with the lugs

z on the bed. The pivotal end v could be guided by means of a block v', sliding between ways r², as indicated in Fig. 5; but the construction first described is preferable.

5 The pulley K may be driven, as shown in Fig. 1, by belting from a pulley E', fixed to the pulley E and of smaller diameter to give the desired ratio of slower travel to the bed-operating shaft J. I prefer, however, to drive
10 both pulleys E and K from pulleys E² and K², respectively, on a counter-shaft, according to the arrangement shown in the diagram Fig. 6.

In Fig. 1 is shown the usual friction-brake U, applied to the operating-shaft B, which
15 brake is omitted from the remaining figures for greater clearness.

The provision of a one-revolution clutch L for controlling the bed-operating shaft J is preferable, but is not essential to my invention, as this shaft might be driven continuously for certain kinds of work or might be driven through the medium of other clutches or belt-controlling means than those of the one-revolution type.

25 My invention may be modified in certain particulars without departing from its essential features. For example, the clutch F may be actuated otherwise than through the medium of the bed D, acting through tappets. Thus any part of the mechanism which moves
30 when the bed moves may be utilized for setting in motion at the proper time the clutch which drives the shaft B.

The link P is essentially a toggle-link, whether the upper link N (constituting with it a pair of toggle-links) is used or not, since this upper link may be substituted by other means for guiding the pivotal end v of the link P, such as by the provision of guideways,
40 as described with reference to Fig. 5, which constitute an equivalent for the upper or guiding link.

I claim as my invention the following-defined novel features, substantially as hereinbefore specified, namely:

1. The combination of the sliding head for carrying the upper die, its operating-shaft, a one-revolution clutch for driving said shaft, the sliding bed for carrying the lower die, a bed-operating shaft and connections for sliding said bed beneath the head and back, and means for engaging said clutch at or near the end of the advancing movement of said bed, adapted to cause the shaft to revolve so as to bring the dies together after the slide has advanced into its operative position and to separate them before the slide commences its return stroke.

2. The combination of the sliding head for carrying the upper die, its operating-shaft, a one-revolution clutch for driving said shaft, the sliding bed for carrying the lower die, a bed-operating shaft and connections for sliding said bed beneath the head, causing it there to dwell, and then returning it, and means for engaging said clutch timed to cause the shaft

to revolve and bring the dies into and out of engagement during said dwell of the bed.

3. The combination of the sliding head for carrying the upper die, its operating-shaft, a one-revolution clutch for driving said shaft, the sliding bed for carrying the lower die, a bed-operating shaft and connections for sliding said bed beneath the head, causing it there to dwell, and then returning it, said shafts having driving means for turning them at differential speeds, that of the former being materially faster than the latter, and means for engaging the clutch of the former and faster shaft at or near the end of the advancing movement of the bed, timed to cause the revolution of the shaft to bring the dies into and out of engagement during said dwell of the bed.

4. The combination of the sliding bed for carrying the lower die, the sliding head for carrying the upper die, the operating-shaft for said head, a one-revolution clutch for driving said shaft, and means for engaging said clutch operated by the advancing movement of the bed and adapted to cause the shaft to bring the dies together after the slide has advanced into its operative position.

5. The combination of the sliding bed for carrying the lower die, the sliding head for carrying the upper die, the operating-shaft for said head, a one-revolution clutch for driving said shaft, and means for engaging said clutch comprising an adjustable tappet carried by the bed, and a device arranged to be displaced thereby toward the end of the advancing movement of the bed and connecting to said clutch to engage the latter.

6. The combination of the sliding bed for carrying the lower die, the sliding head for carrying the upper die, the operating-shaft for said head, a one-revolution clutch for driving said shaft, means for engaging said clutch operated by the advancing movement of the bed and adapted to cause the shaft to bring the dies together after the slide has advanced into its operative position, and means for insuring the disengagement of the clutch at the end of one revolution.

7. The combination with the sliding head for carrying the upper die, and means for operating it, of the sliding bed for carrying the lower die, a bed-operating shaft and connections for sliding said bed beneath the head and back, said connections comprising a toggle-link operated by said shaft, and a lever moved thereby and communicating its movement to the bed, said link arranged to approximate at one end of its movement a position at right angles to the path of the thrust imparted to it from said shaft, whereby to diminish the movement imparted to the lever and impart a dwell to the bed when the latter reaches the operative position of the dies.

8. The combination with the sliding head for carrying the upper die, and means for operating it, of the sliding bed for carrying the

lower die, a bed-operating shaft and connections for sliding said bed beneath the head and back, said connections comprising a toggle-link one end of which is restrained to movement in a definite path, a crank on said shaft and connecting means for communicating its thrust to said end of said link, a lever to which the opposite end of the link is connected, said link arranged to approximate at one end of its movement a position at right angles to the path of the thrust imparted to it from said shaft, coincidentally with a dead-center position of said crank, whereby together to diminish the movement imparted to the lever and impart a dwell to the bed when the latter reaches the operative position of the dies.

9. The combination of the sliding head for carrying the upper die, its operating-shaft, the sliding bed for carrying the lower die, a bed-operating shaft, and mechanical connections between said latter shaft and the bed for sliding the latter into operative position with its die beneath the upper die, and for returning it, said connections comprising a pair of toggles, actuated by said shaft and communicating movement to the bed, arranged to straighten coincidentally with the operative position of the dies, to impart a dwell to the bed.

10. The combination of the sliding head for carrying the upper die, its operating-shaft, the sliding bed for carrying the lower die, a bed-operating shaft, and mechanical connections between said latter shaft and the bed for sliding the latter into operative position with its die beneath the upper die, causing it there to dwell while the dies come together and separate, and for then returning it, a stop for the bed in said operative position, and a cushioning-spring interposed in the bed-driving connections adapted to yield and take up superfluous motion during the dwell of the bed.

11. The combination of the sliding head for carrying the upper die, its operating-shaft, the sliding bed for carrying the lower die, a bed-operating shaft, and mechanical connections between said latter shaft and the bed for operating the latter, comprising a toggle-

link P having its end *v* confined to a definite path and operated from said shaft, a lever-arm Q to which the opposite end of said link is pivoted, a lever-arm Q' fixed to the arm Q, and a link connecting the arm Q' to the bed.

12. The combination of the sliding head for carrying the upper die, its operating-shaft, the sliding bed for carrying the lower die, a bed-operating shaft, and mechanical connections between said latter shaft and the bed for operating the latter, said connections comprising a lever-arm Q', and compressible link S connecting said arm to the bed, said link formed with two relatively sliding members, one pivoted to said lever-arm and the other pivoted to the bed, and with a cushion-spring *y* between them adapted to yield and take up superfluous motion during the dwell of the bed.

13. In a press, the combination with the sliding bed D and its operating-shaft J and intermediate connections, of a compressible link S forming part of said connections and comprising two relatively sliding members, with a cushion-spring *y* between them adapted to yield and take up superfluous motion during the dwell of the bed, and an adjusting-screw *a'* for varying the tension of said spring.

14. In a press, the combination with the sliding bed D and its operating-shaft J, of means for communicating motion from said shaft to the bed consisting of a crank J' on said shaft, a pair of toggle-links N P, a connecting-rod M from said crank to the joint of said links, a lever-arm Q receiving the thrust of said toggle-links, a rock-shaft R on which said arm is fixed, a lever-arm Q' fixed on said shaft, and a link connection between said latter arm and the bed, arranged to straighten said toggle coincidentally with the operative position of the dies to impart a dwell to the bed.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

FRANK M. LEAVITT.

Witnesses:

FRED WHITE,
THOMAS F. WALLACE.

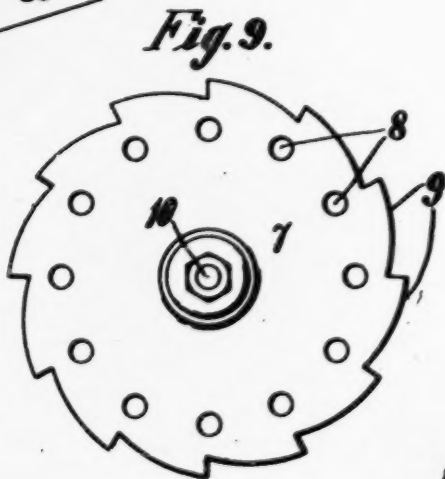
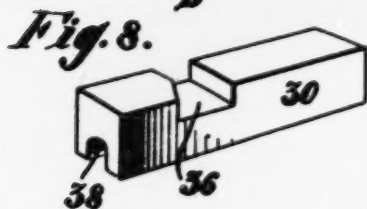
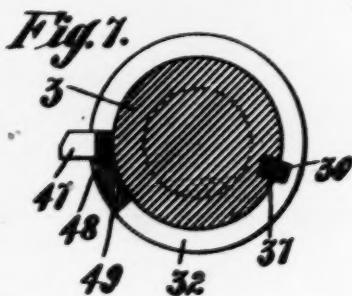
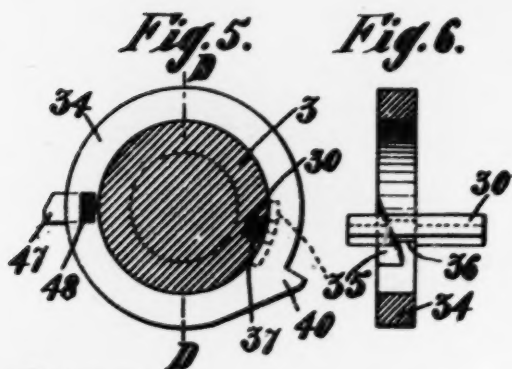
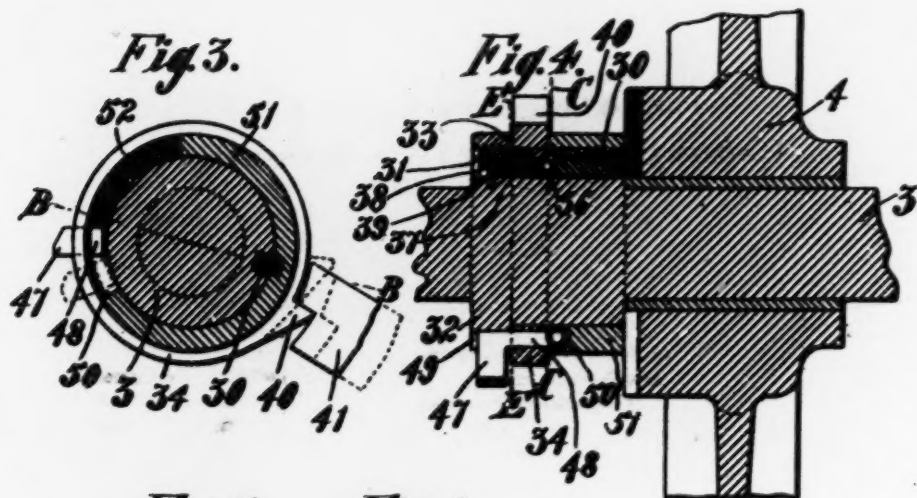
Part of Defendants' Exhibit K.
(Letters Patent No. 772,113 to H. Osswald,
October 11, 1904.)

H. OSSWALD.
POWER PRESS.

APPLICATION FILED JAN. 22, 1903.

NO MODEL.

2 SHEETS—SHEET 2.



Witnesses:

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Henry Pheme

Inventor:

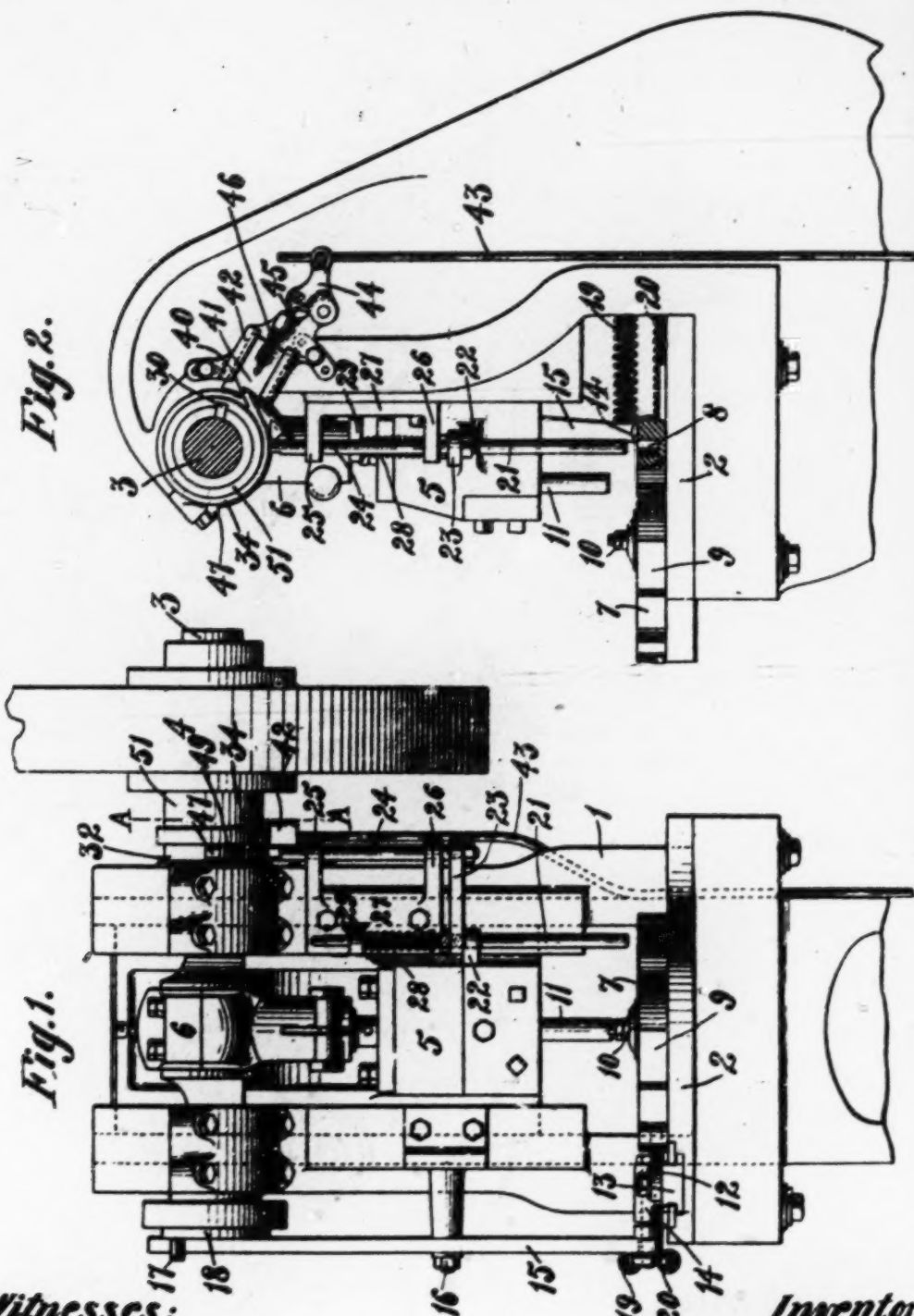
Harman Oswald
By *Brown & O'Connell*
his Attorneys

H. OSSWALD.
POWER PRESS.

APPLICATION FILED JAN. 22, 1903.

NO MODEL.

3 SHEETS—SHEET 1.



Witnesses:

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643-644

Inventor:

Herman Oswald
By *G. H. Hume*
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UNITED STATES PATENT OFFICE.

HERMAN OSSWALD, OF NEW YORK, N. Y.

POWER-PRESS.

SPECIFICATION forming part of Letters Patent No. 772,112, dated October 11, 1904.

Application filed January 22, 1902. Serial No. 140,145. (No model.)

To all whom it may concern:

Be it known that I, HERMAN OSSWALD, a citizen of the United States, and a resident of the borough of Brooklyn, in the city and State of New York, have invented a new and useful Power-Press, of which the following is a specification.

My invention relates to a power-press for cutting and forming metal or other material, the object being to provide means whereby the press shall be automatically stopped in the event the work is not properly adjusted for receiving the tool.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 is a view in front elevation of so much of a press as will serve to discuss the construction and practical operation of my invention. Fig. 2 is a view of the same in side elevation, the drive-wheel being removed. Fig. 3 is an enlarged transverse section through the drive-shaft in the plane of the line A A of Fig. 1 looking toward the left as the drawing is held to read it. Fig. 4 is a partial section taken longitudinally through the shaft and hub of the drive-wheel and parts adjacent thereto, the section being taken in the plane of the line B B of Fig. 3. Fig. 5 is a transverse section through the shaft in the plane of the line C C of Fig. 4. Fig. 6 is a section through Fig. 5 in the plane of the line D D, showing the locking-dog in full length. Fig. 7 is a transverse section through the shaft in the plane of the line E E of Fig. 4. Fig. 8 is an enlarged view in perspective of the locking-dog, and Fig. 9 is a plan view of the work-support.

The supporting-frame is denoted by 1, the bed-plate for receiving the work-support by 2, the drive-shaft by 3, the drive-wheel running loosely on the shaft by 4, and the vertically-reciprocating tool-carrier by 5, the latter being connected with the drive-shaft by suitable eccentric mechanism, (denoted as a whole by 6.) The several parts mentioned above are not explained more in detail herein, as they do not form any part of my present invention, except so far as they coact in a

general way with the parts to which my present invention is more particularly directed.

The work-support is denoted as a whole by 7. It is provided with a series of holes 8 near its periphery and on its periphery with a series of ratchet-teeth 9, the arrangement being such that there is one tooth for each of the holes 8. The work-support is mounted on the bed-plate 2 in rotary adjustment by means of a stub-axle 10, the position being such as to bring the work or that part of the work to be operated upon step by step beneath the operating-tool. (Indicated in Fig. 1 by 11.) The work-support 7 is rotated step by step by means of a pawl 12, pivoted to a slide 13, operated by an arm 14, which in turn is operated by a lever 15, fulcrumed at 16 and actuated in one direction by a pin 17, set in the face of the disk 18 on the drive-shaft 3. The lever 15 is operated in the opposite direction by means of a pair of springs 19 20, leading from the lever 15 back to a point of attachment on the frame 1. The arrangement is such that each revolution of the drive-shaft 3 will advance the work-support 7 one step, corresponding to one tooth 9.

The particular mechanism indicated for driving the work-support 7 does not form a part of my present invention, except so far as it furnishes a means for operating the work-support 7, and hence is not described more in detail.

There is mounted on the frame 1 and in a position to enter successively the holes 8 in the work-support 7 at each downward stroke of the tool a rod 21. This rod 21 slides freely through a lug 22 on the tool-holder 5, so that the latter is permitted to continue its downward stroke even though the rod 21 be prevented from completing its full downward stroke—as, for example, by engaging the top surface of the work-support 7 instead of exactly registering with one of the holes 8. An arm 23 is fixed on the rod 21 to move together with it and carries in its free end an upright stop bar or rod 24, which has a vertically-reciprocating movement in the arms 25 26 of a bracket 27, bolted to the frame 1. A spring 28 on the rod 21, bearing at its up-

per end on a lug 29 on the bracket 27, causes the rod 21, and hence the arm 23 and stop-bar 24, to move downwardly whenever the rod is permitted to do so by the downward movement of the tool-carrier 5 and its lug 23. The upward stroke of the tool-carrier 5 by its bearing against the under side of the arm 23, fixed on the rod 21, carries the rod 21 and the parts fixed thereto upwardly along with it against the tension of the spring 28. When at the limit of its upward stroke and, in fact, until the tool-carrying head 5 has permitted the rod 21 to descend to a point below the top of the work-support 7 the upper end of the stop-bar 24 will rest in position to operate the clutch for connecting the drive-shaft 3 and releasing it from the drive-wheel 4, as follows:

The drive-wheel 4, (see Fig. 4,) loosely mounted on the shaft 3, is locked to and released from the shaft by means of a dog 30, having a sliding movement parallel with the axis of the shaft 3 toward and away from the hub 4 of the drive-wheel in a groove 31, formed in an enlarged portion 32 of the shaft. This enlarged portion of the shaft has an annular groove 33 formed therein for receiving an annular ring 34. The ring 34 has an inwardly-projecting wedge-shaped portion 35, (see Fig. 6,) which coacts with a recess 36 in the dog 30 (see Fig. 8) to withdraw the dog from locking engagement with the hub of the wheel 4 or permitting the dog to slide into locking engagement with the hub of the wheel 4 under the tension of the dog-actuating spring 37, according as the ring 34 is locked in the one direction or the other in the groove 33. The actuating-spring 37 of the dog 30 is seated in the socket 38, one end of the spring bearing against the inner end of the socket and the opposite end bearing against a stop 39, set in the shaft 3. The ring 34 has on its exterior a shoulder 40, (see Figs. 2, 4, 5,) which is intended to engage a switch-plate 41, mounted in sliding adjustment in a bracket 42, secured to the frame 1.

The switch-plate 41 is controlled by a rod 43, leading to a pedal, (not shown,) the said rod 43 being connected to an angle-lever 44, which in turn is connected with the stem 45 of the switch-plate to draw the switch-plate away from the ring 34, a spring 46, seated on the stem of the switch-plate, being utilized to throw the switch-plate toward the ring 34 into locking position with the ring whenever the rod 43 is released. The ring 34 also carries a dog 47, secured thereto by means of a tailpiece 48, (see Fig. 4,) extending at right angles to the body of the dog 47, the said body of the dog 47 being arranged to move freely to a limited extent in a slot or recess 49, formed in the enlarged portion 32 of the shaft in proximity to the grooves in which the ring 34 is seated.

The tailpiece 48, by which the dog is connected to the ring 34, is extended into a groove 50, formed in the enlarged portion of the shaft, or in a collar 51, swaged onto the shaft and made a part thereof after the ring 34 is placed in position. The groove 50 extends in arc form to a limited extent for a short distance around the axis of the shaft, the said grooves or recesses 49 and 50 permitting the dog 47, carried by the ring 34, to move, together with the ring 34, to a limited extent relative to the shaft 3. A spring 52 (see Fig. 3) is seated in the curved groove 50 with one end bearing against the base of the groove and the other against the tailpiece 48 for the purpose of throwing the ring 34 and holding it normally in position to release the dog 30 and permit it to lock the shaft 3 to the drive-wheel 4.

The body of the dog 47 or its extreme outer end is in position to engage the stop-bar 24, hereinabove referred to, whenever the latter is not lowered to a point below that which would be determined by the lower end of the rod 21 resting on the surface of the work-support.

The operation of the mechanism which forms the subject-matter of my present invention is as follows: Whenever the work-support 7 carries the work into the exact position to be operated upon by the tool 11, the rod 21 will exactly register with one of the holes 8, and when the rod 43 is depressed to draw the switch-plate 41 out of engagement with the abutment 40 on the ring 34 the ring 34 under the tension of its actuating-spring 52 will be moved to release the dog 30 and lock the shaft to the continuously-driven wheel 4 and the shaft 3 will revolve to reciprocate the tool. The dog 47 when the parts are in the position described above, with the rod 21 in the hole 8, will freely pass the stop-bar 24, and the shaft 3 will continue to rotate until the switch-plate 41 is allowed to slide toward the ring 34 to engage the abutment 40 on the ring 34 and force it against the tension of its operating-spring 52 back into position to draw the dog 30 back out of engagement with the hub of the wheel 4 and at the same time lock the shaft 3 against further rotary movement. When from any cause the work-support 7 fails to move a full stroke into position to bring the work into its exact relation to the cutting-tool, the rod 21 will fail to register with a hole 8, and when the machine is started, as before, and the downward movement of the cutter begins the rod 21 will engage the top surface of the work-support, and hence the stop-bar 24 will not be lowered out of the path of the dog 47, so that the latter will engage the stop-bar soon after the shaft 3 has begun its rotary movement thereby through the attachment of the dog 47 with the ring 34, moving

the said ring 34 backwardly against the tension of the spring 52 in a manner quite similar to that in which the switch 41 by its engagement with the abutment 40 would have moved it, and so withdrawing the dog 30 from engagement with the hub of the wheel 4 and releasing the shaft 3 from the wheel, thereby stopping the action of the cutter 11 until such time as the work shall have become properly centered.

What I claim is—

1. The combination with a tool and means for operating it and a work-support for centering the work with respect to the tool, of means independent of the work for automatically stopping the operation of the tool whenever the work is not properly centered with respect to the tool.

2. The combination with a reciprocating tool-carrier, a rotary shaft for operating it; a drive-wheel and means for locking the drive-wheel to and releasing it from the shaft, of a rotary work-support and a part arranged to reciprocate with the tool and movable with respect to the tool-holder, the means for locking the shaft to and releasing it from the drive-wheel being under the control of said reciprocating part to release the shaft from the drive-wheel whenever the work is not properly centered with respect to the tool.

3. The combination with a reciprocating tool-holder, a drive-shaft for operating it, a drive-wheel and means for locking the drive-wheel to and releasing it from the shaft, of a rotary work-support provided with a series of holes in its face, a reciprocating rod arranged to enter one of said holes when the work is properly centered with respect to the cutter and means under the control of said reciprocating rod for releasing the shaft from the drive-wheel when the work is not centered.

4. The combination with a reciprocating tool-holder, a shaft for operating it and a wheel for operating the shaft, of a dog carried by the shaft for locking the wheel to and releasing it from the shaft, an annular ring having a limited rotary movement on the shaft and engaged with the said dog for drawing it out of and permitting it to move into locking adjustment, a switch under the control of the operator for releasing said ring to throw the dog into locking position, a work-support and means under the control of the work-support for withdrawing said dog from lock-

ing position independently of the aforesaid switch.

5. The combination with the tool-operating mechanism, of a dog for starting and stopping the operation, an annular ring for operating the dog, a second dog carried by the annular ring and having a limited bodily movement in a circular path around the axis of the drive-shaft, a work-support, a reciprocating rod in position to engage the work-support, a stop-bar carried by the said rod in position to engage the aforesaid dog carried by the ring and means under the control of the operator for permitting the said ring to rock in one direction and forcing it to rock in the opposite direction with respect to the shaft, the said stop-bar serving, at the same time, to permit the ring to operate in one direction or force it to operate in the opposite direction in the event the work is not properly centered.

6. The combination with the tool-holder and its operating mechanism comprising a shaft and drive-wheel loosely mounted on the shaft, of a spring-actuated dog movable in a direction parallel with the axis of the shaft toward and away from the hub of the operating-wheel, an annular ring having a wedge-shaped internal projection for operating the said dog, a dog carried by the said annular ring, a spring for operating the said annular ring in one direction, a work-support and means under the control of the work-support for engaging the said dog carried by the annular ring to operate the ring in opposition to the said spring.

7. In combination, a tool-holder and its operating mechanism, a rotary work-support provided with an annular series of holes, means for moving the work-support step by step, a spring-actuated rod arranged to reciprocate with the work-support and enter some one of the holes in the annular series when the work is properly centered with respect to the cutter and means under the control of the said reciprocating rod for stopping the operation of the cutter whenever the said rod fails to enter one of the holes.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 21st day of January, 1903.

HERMAN OSSWALD.

Witnesses:

FREDK. HAYNES,
GEORGE BARRY, Jr.

Part of Defendants' Exhibit K.
(Letters Patent No. 783,403 to G. Knight,
February 21, 1905.)

G. KNIGHT.

MACHINE FOR CUTTING STOCK FOR THE ORNAMENTATION THEREOF.

APPLICATION FILED APR. 30, 1904.

4 SHEETS—SHEET 1.

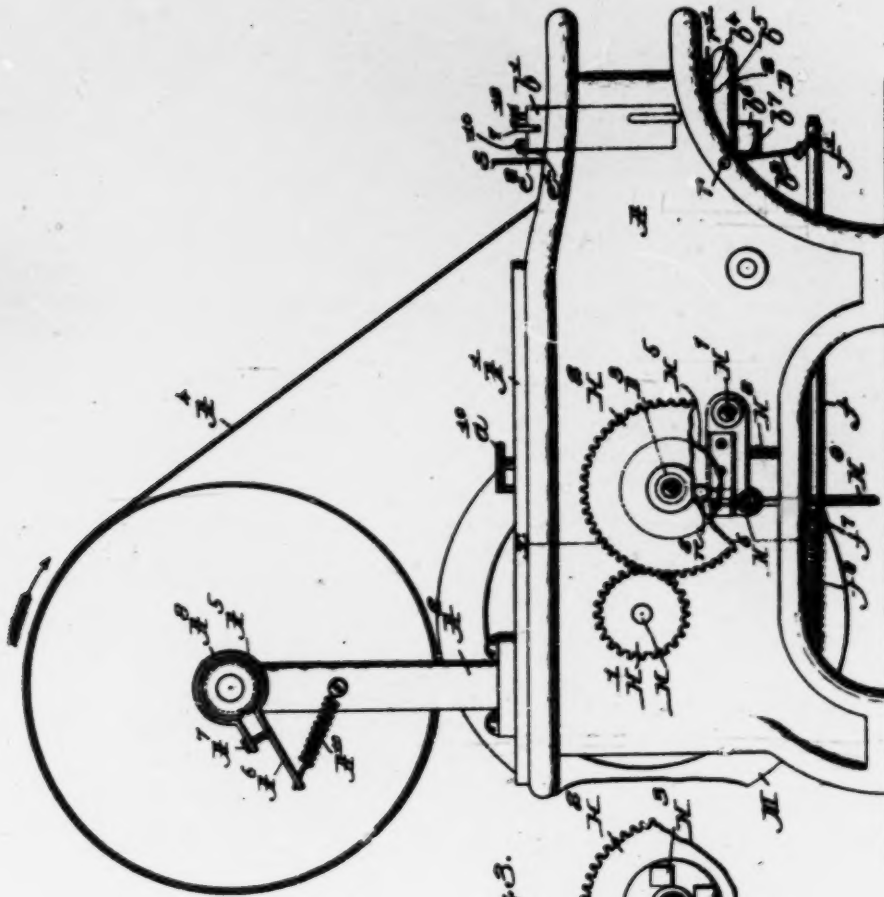
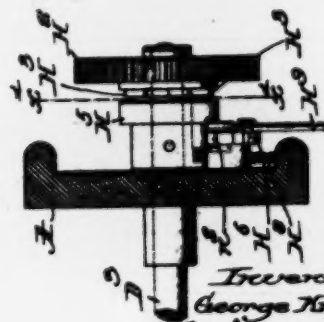


Fig. 1.

Fig. 3.



Fig. 2.

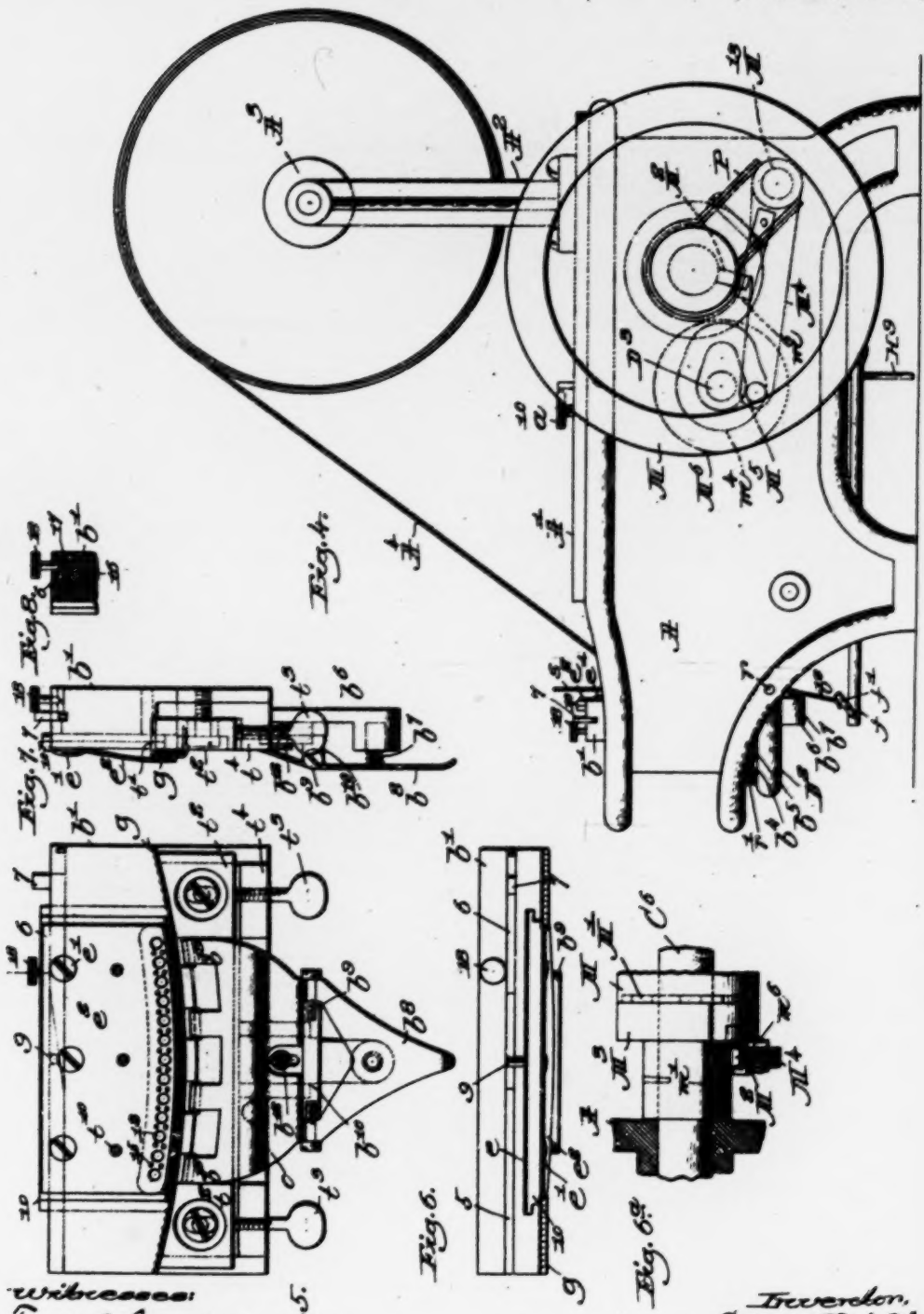


Witnesses:
Fred S. Grunbaf.
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Inventor,
George Knight,
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G. KNIGHT.
MACHINE FOR CUTTING STOCK FOR THE ORNAMENTATION THEREOF.
APPLICATION FILED APR. 28, 1904.

4 SHEETS-SHEET 1.



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653

654 No. 783,403.

PATENTED FEB. 21, 1905.

G. KNIGHT.

MACHINE FOR CUTTING STOCK FOR THE ORNAMENTATION THEREOF.

APPLICATION FILED APR. 26, 1904.

4 SHEETS—SHEET 3.

Fig. 10

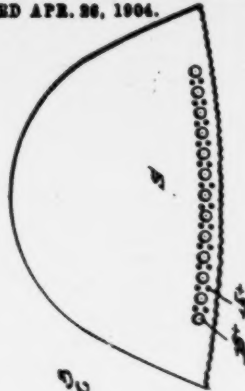
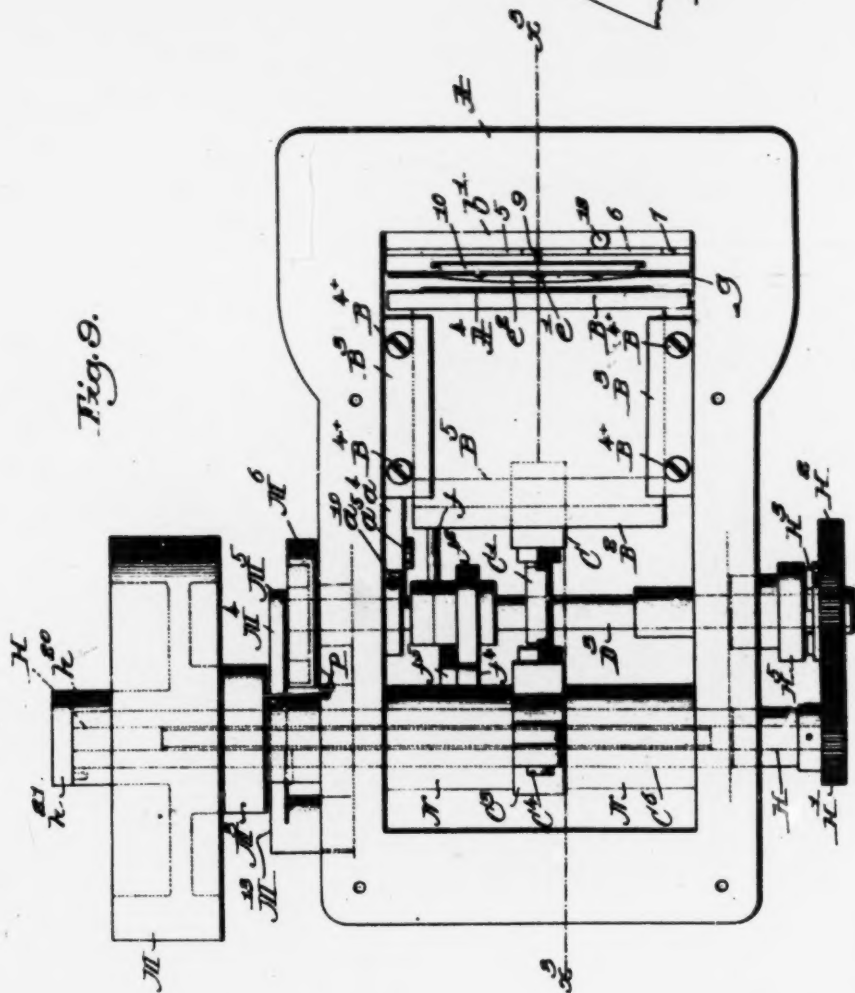


Fig. 9.



Witnesses:
Fred S. Greenleaf
H. C. Linsford

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by Emily Mayory.
attys.

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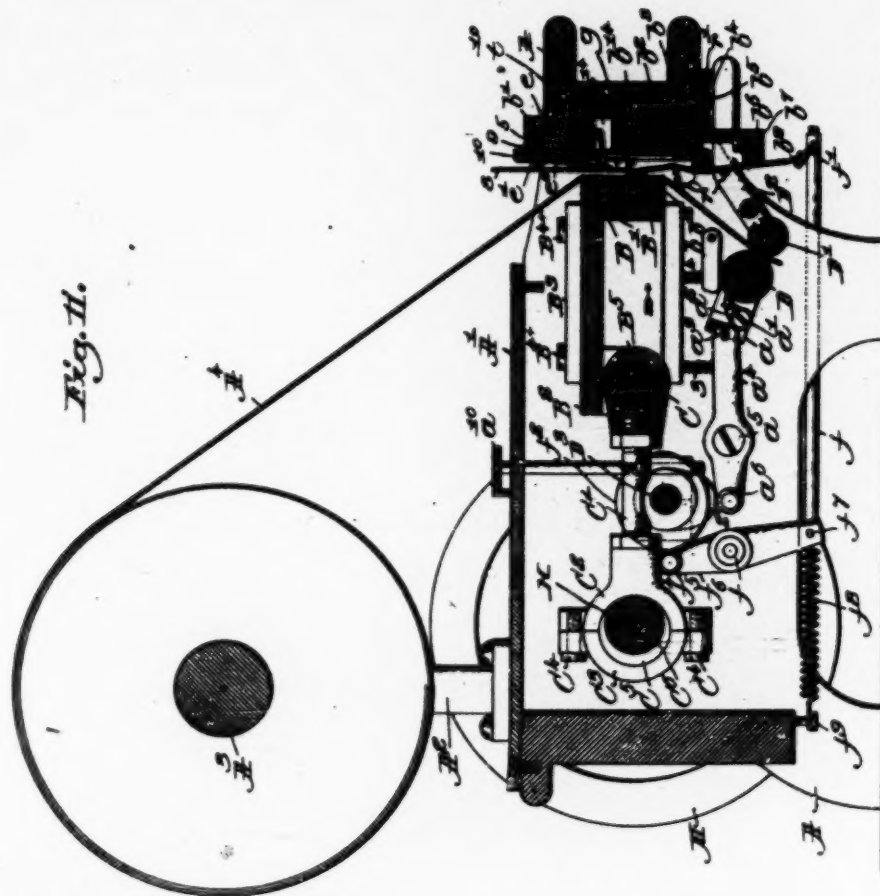


Fig. 11.

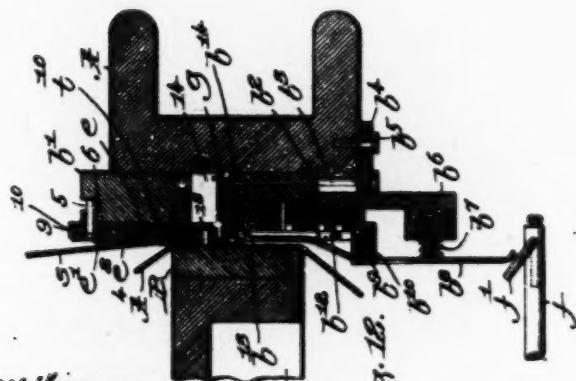


Fig. 12.

Witnesses
Fred S. Greenleaf
H. C. Sumner

Invention
George Knight,
by Henry H. H. H.

UNITED STATES PATENT OFFICE.

GEORGE KNIGHT, OF BROCKTON, MASSACHUSETTS.

MACHINE FOR CUTTING STOCK FOR THE ORNAMENTATION THEREOF.

SPECIFICATION forming part of Letters Patent No. 783,408, dated February 21, 1905.

Application filed April 26, 1904. Serial No. 206,019.

To all whom it may concern:

Be it known that I, GEORGE KNIGHT, a citizen of the United States, residing at Brockton, in the county of Plymouth and State of Massachusetts, have invented an Improvement in Machines for Cutting Stock for the Ornamentation Thereof, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

This invention has for its object the production of a novel machine for cutting stock for the ornamentation thereof.

In accordance with my invention the stock to be ornamented either by punching there-through holes at any point or scalloping or pinking the edge in desired form is applied to the machine, and the punches and pinking-cutters employed for ornamenting the stock after passing through the stock contact with a non-fibrous background or backing-strip, shown as comprising a strip of paper led from a suitable roll, the machine having means whereby the strip is moved intermittently, so that at each operation of the punches or pinking-cutter a fresh portion of the strip may be brought into position for use. The stock to be shaped for ornamental purposes is sustained by its edge standing on a movable gage, and the side of the stock is laid next a stripper having openings through which the hollow punches are made to pass in entering the stock. As herein shown, the strip is acted upon at proper times by a movable carriage or plunger that forces the strip against the stock, forcing the latter against the stripper, the hollow punches thereafter entering the stock and contacting with the strip, the cutting edges of the hollow punches punching holes through the stock. The stripper is connected with or forms part of a punch-plate adjustably sustained on a punch-plate holder that may be readily withdrawn from the frame of the machine. The gage for sustaining the edge of the stock is made movable with the carriage.

Figure 1 is a right-hand side elevation of a machine embodying my invention. Fig. 2 is a section below the line x ; Fig. 3 is a section looking to the right from the line x' .

Fig. 2. Fig. 4 is a right-hand side elevation of the machine shown in Fig. 1. Fig. 5 shows the plate-holder and its attached parts removed from the machine; Fig. 6, a top or plan view of the parts shown in Fig. 5. Fig. 6^a is a detail showing part of the hub of pulley M and the collar carrying the dog and part of lever M'. Fig. 7 is a right-hand end elevation of the parts shown in Fig. 5. Fig. 8 is a detail to be referred to. Fig. 9 is a plan view of the machine shown in Fig. 1. Fig. 10 shows a piece of stock ornamented as it may be by the use of the machine herein illustrated. Fig. 11 is a section on the line x' , Fig. 9; and Fig. 12 is an enlarged detail showing the stock as being forced onto the punches, the latter contacting with the background.

Referring to the drawings, A represents the framework of the machine, it being of suitable shape to sustain the working parts to be described. The upper edge of the framework sustains a cover-plate A', on which is erected standards A'', that receive the journal of a roll A', on which is wound a strip, preferably of paper, forming what I have herein chosen to designate as a "background" or "backing-strip" A'. The free end of this strip, of whatever material, is led over a cutter-plate B, preferably of hardened steel, connected by screws B' with a carriage B'', the edges of which enter a suitable guideway, one portion of the guideway presenting overlapping gibs B'', held by screws B'''. The carriage B' has a stud B'', that is embraced by the head C of an eccentric-strap comprising, in connection with said head, a rod C' and strap parts C''C'''. The strap parts are clamped by suitable screws C'' on an eccentric C'', secured to a hollow shaft C'', to be described, said shaft in its rotations reciprocating the carriage. The free end of the strip after having been drawn across the cutter-plate is entered between suitable feed-rolls D-D'. The roll D' is what may be considered the "sustaining-roll" of the pair of feed-rolls, its journal being free to turn in suitable arms D'', pivoted at r and acted upon by springs r' , so that the roll D' may be held firmly but with a yielding pressure against the roller D or the strip therebetween. Both these rolls may be scored or fluted in the di-

rection of their length, as represented by the roll D. The roll D has its journals in suitable bearings of the framework, and the journal is surrounded at one end by a pawl-carrier *a*, having a screw-stud *a'*, upon which is mounted a spring-controlled pawl *a''*, said spring causing said pawl to be borne always toward the teeth of the roller D. The pawl-carrier has a pin *a'*, that is embraced by the forked end of a feed-lever *a'*, pivoted at *a'* and having, as shown, at its opposite end a roller or other stud *a'*, that is acted upon by a cam 2 (see Figs. 9 and 11) at each rotation of the shaft D'. The roller *a'* is kept normally pressed toward its actuating-cam 2 by a spring 3, and to prevent any backward movement of the feed-rollers I have employed a detent *b*, which is acted upon by a spring 4.

The shaft or journal of the roller A' has fast on one end a hub A', that is embraced by a friction-strap A', preferably of steel or other metal, that is clamped about the hub by means of a clamp-screw A'. Preferably I interpose between the strap and the hub a piece of leather or other friction material A'. The strap A' has connected with one end a spring A'', that yields as the roller containing the background is turned in the direction Fig. 1, said spring, acting through the strap and tension means comprising the hub, taking up and preventing the formation of slack in the background.

The feed-stroke of the lever *a'* must be varied to economize the paper of the background, as it will be understood that the formation of some patterns by the punches will injure more or less of the background, and therefore to vary the feed-stroke to the work to be done I have provided a feed-adjusting rod *a''*, (see Fig. 11,) that may be rotated to place its lower end in such relation to the short arm of the lever *a'* as to stop the same on its approach to the cam 2, so that more or less of the throw of the cam may be made effective in turning the lever and feeding the background.

The framework at its front end is provided with a space for the reception of a movable plate-holder *b'*. (Shown in section in Figs. 11 and 12 and detached in Figs. 5 to 7.) The shape of the plate-holder in cross-section is best represented in Figs. 11 and 12. The holder has a shoulder *b'* near its lower end that is sustained by adjustable stops *b'*, shown as screws extended through a plate *b'*, represented as connected with the framework by screws *b'*. Depending below the shoulder *b'* the holder *b'* has an ear from the under side of which depends an arm *b'*, shown as having a pocket for the reception of a spring *b'*, which acts against the lower arm *b'* of a gage pivoted at *b'* to a stand *b''*, adjustably connected by a screw *b''* with the depending portion of the bed, the upper end of said gage having a series of arms *b''*, which are turned over to constitute a series of supports *b''* to receive

and sustain the lower edge of the stock to be ornamented, said stock being supposed, as represented in Fig. 10, to be of a shape for use as a toe-cap. It will, however, be understood that the invention herein to be described is not to be limited for punching and ornamenting leather only, as instead of leather it may be used to punch and ornament any other stock, and the stock may be used in any part of a shoe or for any other purpose where stock having holes punched therein or punched and scalloped is desired. Fig. 11 shows the supports of the gage in position to sustain the stock, and Fig. 12 shows the same as moved from under the stock.

The upper edge of the holder *b'* is provided with a groove 5, (see Figs. 9, 11 and 12,) that receives a wedge-shaped slide-bar 6, (see dotted lines,) having a projection 7 at one end. The wedge-shaped slide-bar sustains a pin 8, extended backwardly from a punch-plate 10, and by moving said slide-bar longitudinally the punch-plate may be positioned vertically on the holder with relation to the supports *b''* of the gage, so that the holes may be punched at the desired distance from the lower edge of the stock. The punch-plate has (see Fig. 5) a series of hollow punches 13, (see Figs. 11 and 12,) having sharp edges, and the punching passing through said punches are discharged into the space 14, from which they drop to the floor. The punch-plate may and preferably will have other or auxiliary punches represented by 15 in Fig. 5, the combination of these punches and variations in their shape enabling the ornamentation of the stock to be varied—as, for instance, the punches 13 may punch holes 13^x and punches 15 holes 15^x, and there may be more or less of these holes according to the number of punches, and by putting the punches in different relation one to the other the character of the ornamentation may be variously changed. I have provided means for locking the slide-bar in any adjusted position, the means being a pin 16, located in a hole 17 of the holder, said pin having a tapered end which is acted upon by the tapered end of an adjusting-screw 18, the turning of the adjusting-screw 18 to enter the hole 17 causing the pin to be moved longitudinally and lock the slide-bar in its desired position. The inner ends of the hollow punches are made to enter holes in the punch-plate 10, the rear ends of said punches abutting part of a steel plate *c*, applied to the back of said punch-plate. To the front or left-hand face of the punch-plate I have connected by screws *c'* a stripper-plate *c'*, it having a series of holes to surround the punches during the punching operation. This stripper-plate shields the punches when the stock is being inserted to be ornamented and also strips the punched stock off from the punches when the stripper-plate is allowed to assume its normal position after the punches

have entered the stock. I have shown a series of spiral springs t^a interposed between the punch-plate and stripper, said springs aiding in moving the stripper.

Fig. 11 shows the carriage and the rest B in their retracted position and with the stock resting on the supports b^a . Now as the carriage is moved to the right in the direction of the arrow thereon, Fig. 11, the background of paper is moved forwardly and pushed against the rear side of the stock s , causing the stock to be forced against the stripper-plate, the stripper-plate yielding so that its holes pass over the punches for a distance sufficient to permit the ends of the punches against which the stock is forced to penetrate the stock and contact with the background. After each operation of this kind the feed-rolls will be moved to bring opposite the punches a portion of the background other than that which received the impact of the stock where the same was acted upon by the punches. As the carriage and rest are retracted the stripper is moved outwardly into the position Fig. 11 and strips the stock from the punches, and this done a gage-mover f , shown as a rod having an adjustable finger f' , is moved forwardly from the position Fig. 11 by the action of a cam f^a , carried by shaft D^2 on a roller or other stud f^b of a lever f^c , pivoted at f^d , said lever being connected at its lower end with said rod by a stud-screw f^e . A spring f^f , connected with said lever and with a stud f^g of the frame, normally moves the rod f backwardly or to the left viewing Fig. 11. As the rod f is moved to the right the finger f' meets the lower end b^b of the gage and turns the latter so that any waste of stock may drop out of the machine. This waste is in the form of a strip and is formed of the material cut off from the lower end of the stock by a pinking-cutter g , shown as a blade having a cutting edge, which may, if desired, be scalloped or be made of any desired shape customarily used in scalloping or so-called "pinking." Figs. 11 and 12 show said blade in section, and it is represented as clamped in working position between shoulders t' of the punch-plate holder, and a movable-jaw t'' , held in its operative position by suitable screws t''' inserted in threaded holes in a flange t^d of said holder.

The shaft C^2 , represented as hollow, turns in two inwardly-extended hubs N, and through this shaft is extended a drive-shaft H, on which is fastened a pinion H' , that engages a gear H'' , loose on the shaft D^2 , said gear having a series of teeth H^3 , that are engaged when it is desired to start the shaft D^2 and rotate the same once by a slide-tooth n^a , contained in a hub H^b and adapted to be projected therefrom to be engaged by the teeth of said gear whenever a spring-pressed lever H^c , pivoted at H^d and normally kept elevated by a spring H^e and adapted to be lowered through a rod H^f , con-

nected by a treadle, is depressed against the spring H^e . The shaft H has keyed upon it a fast pulley M, having a series of teeth M' , (see Fig. 6^a.) that may be engaged by a sliding dog or key M^2 , carried by a collar M^3 , secured to the hollow shaft C^2 , said dog being acted upon by a spring m' , this dog M^2 when projected from the hub by its spring being engaged by one or the other of the series of teeth M' at the inner side of the hub of the pulley M. The pulley is rotated continuously and rotates the shaft H, fixed with relation thereto by studs A^a in the head A^b entering holes in the hub of the pulley, thus keying the pulley to said shaft; but the hollow shaft C^2 and the shaft D^2 are rotated intermittently and at different speeds. Each shaft C^2 and D^2 rotates once and stops. When the lever H^c is depressed, the continuously-moving gear H^3 becomes engaged with and starts the shaft D^2 in advance of the hollow shaft C^2 , and having made a quarter-turn the cam-groove m^a of the disk M^4 , acting on a stud of a lever M^5 , pivoted at one end on a stud M^6 , held in the frame, is moved to withdraw an arm m^b of said lever from a notch in the dog M^2 , thus releasing said dog that the latter may come into engagement with the rotating pulley M and start the hollow shaft at a faster speed, so that said hollow shaft completes a revolution by the time the shaft D^2 has completed three-quarters of a revolution. During the last quarter-revolution of the shaft D^2 the feed-rolls are turned to move the background, and just before the rotation of shaft D^2 is stopped the rod f is moved to turn the gage into position to receive the next piece of work to be put into place to be acted upon.

Figs. 11 and 12 show the spring b' in the position it will occupy when the pinking-cutter is employed; but in case the pinking-cutter is omitted then I may remove the spring b' and put the same into a hole o , (shown by dotted lines in Figs 5 and 12,) said spring in such position acting normally to keep the upper end of the gage pressed against the background or the rest sustaining it, the employment of the spring b' in the position shown in Fig. 12 and the projection f' to push the lower end of the gage in opposition to said spring being required only when the pinking-cutter is used, it being understood that the cuttings removed by the pinking-cutter must pass between the upper end of the gage b' and the background in the space shown in Fig. 12.

The background prevents the rapid dulling of the cutters coacting with the cutter-plate B and also enables the punches and blade to make a cleaner cut than though the punches and blade contacted directly with the cutter-plate after passing through the stock.

It will be noted that the stock to be punched is supported by its edge on the gage instead of being laid on a horizontal bed, as usual.

The smaller part of the hub M^1 may be sur-

rounded by a brake-band P (see Figs. 4 and 9) to stop the rotation of shaft C when released from the pulley M.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a machine of the class described, a detachable holder having a connected gage, a punch-plate removably supported by said holder and having a plurality of punches, a pinking-cutter also removably supported by said holder, and means to cause the punches to penetrate the stock, the removability of the punch-plate and pinking-cutter permitting any one of a series of different plates and cutters to be used, according to the design desired for a shoe-tip.

2. In a machine of the class described, a punch-plate having a series of punches, a stripper yieldingly supported by said punch-plate and an independent yielding gage located below the edge of the punch-plate and stripper to support the edge of the stock to be punched, a cutting-plate, and actuating means to cause the punches to penetrate the stock.

3. In a machine of the class described, a plate-holder, a connected punch-plate having a series of hollow punches, a yielding laterally-movable gage sustained by said holder for the edge of the work being punched, and means to adjust the relative positions of the punch-plate and gage to determine the distance of the row of holes from the edge of the material.

4. In a machine of the class described, a gage, a plate-holder, a punch-plate having a series of hollow punches, a detachable pinking-cutter, and means to adjust the position of the punch-plate with relation to said gage and pinking-cutter.

5. In a machine of the class described, a punch-plate having a series of holes for the reception of hollow punches, a plate coacting therewith having a series of smaller holes and located with relation to the punch-plate to sustain the inner ends of said hollow punches.

6. In a machine of the class described, a series of hollow punches, means to sustain a backing-strip, means independent of said punches to feed said strip, and means to cause the punches to penetrate the stock backed up by said strip.

7. In a machine of the class described, a series of hollow punches, a rest to sustain a backing-strip, means independent of the punches to feed said backing-strip, and means to change the relative positions of said rest and punches, that the latter may penetrate the stock resting against said backing-strip.

8. In a machine of the class described, a series of hollow punches, a cutter-plate to

sustain a backing-strip, and means to change the relative positions of said plate and punches, that the latter may penetrate the stock resting against said backing-strip, and means independent of the punches to feed the strip after each punching operation.

9. In a machine of the class described, a series of hollow punches, a stripper-plate, means independent of said punches to feed a backing-strip and cause the same to contact intermittently with one side of the stock and cause the opposite side thereof to act against the stripper-plate, the punches thereafter entering the stock opposite where the stock contacts with said strip.

10. In a machine of the class described, a series of hollow punches, a gage to position the stock, means independent of said punches to feed a backing-strip, the latter supporting one side of the stock while the punches enter the opposite side of the stock.

11. In a machine of the class described, a series of hollow punches, a gage to position the stock, means to sustain a backing-strip, the latter supporting one side of the stock while the punches enter the opposite side of the stock, and means independent of the punches to feed said strip.

12. A carriage having a cutter-plate, a punch-plate having a series of hollow punches, a backing-strip crossing said plate, means to feed said strip intermittently over said plate while the punches occupy their inoperative positions, and means to change the relative positions of said carriage and punches that the latter may cut through the stock into the backing-strip, thereby insuring a clean cut of the stock.

13. In a machine of the class described, a punch-plate having a series of detachable hollow punches, and a stripper-plate having one edge fixed near one edge of said plate, the opposite edge of the stripper standing normally at a short distance beyond the outer ends of said punches, yielding under the action of forcing the stock against said stripper-plate while the punches penetrate the stock.

14. In a machine of the class described, a gage to sustain the edge of the stock to be pinked, a pinking-cutter, and means to move said gage automatically after each operation of the pinking-cutter to effect the discharge of the cutting.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE KNIGHT.

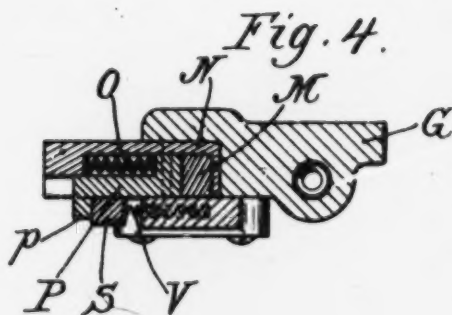
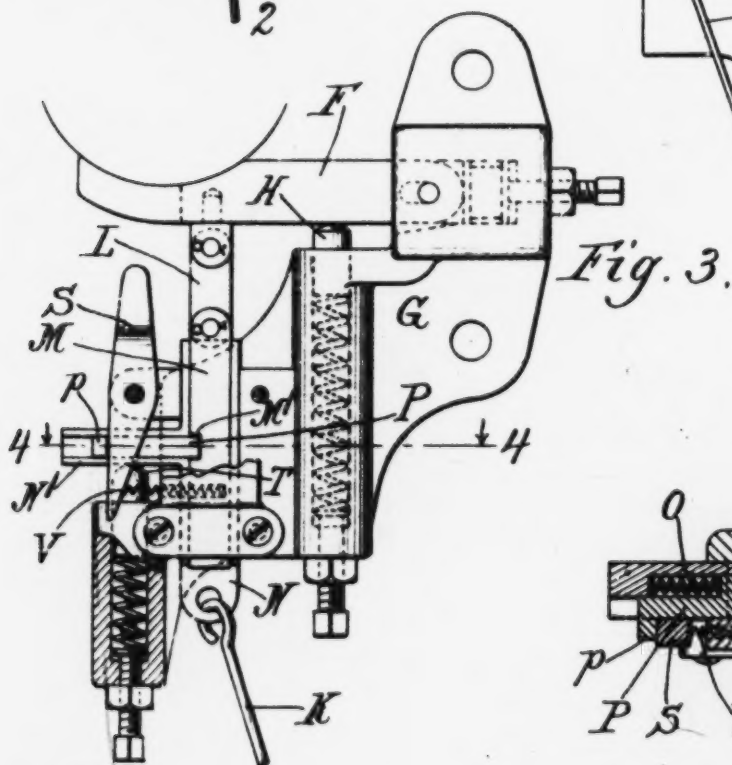
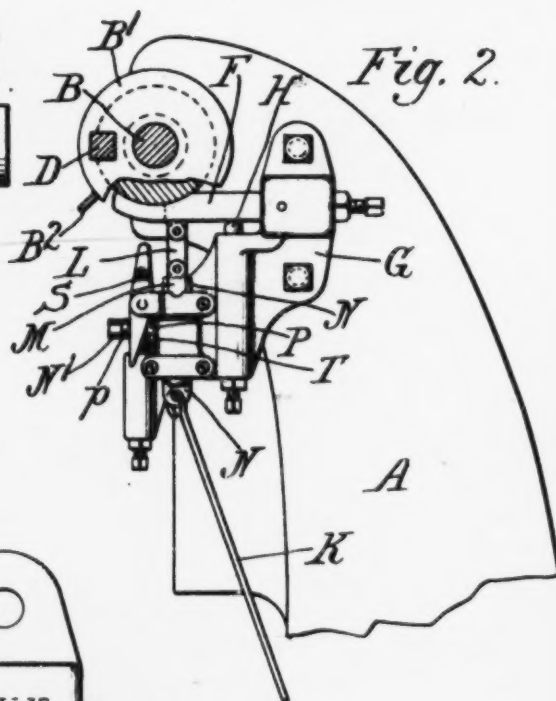
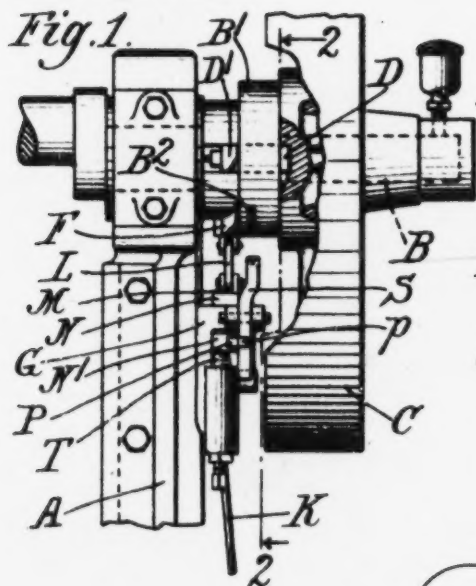
Witnesses:

GEO. W. GREGORY,
EDITH M. STODDARD.

Part of Defendants' Exhibit K.
(Letters Patent No. 902,545 to J. L. Allen,
November 3, 1908.)

902,545.

Patented Nov. 3, 1908.



Witnesses.
 Edward T. Wray.
 J. S. Abbott

Inventor.
 JOHN L. ALLEN.
 by *Durston Durston*
 his Attys.

UNITED STATES PATENT OFFICE. 663

JOHN L. ALLEN, OF HASTINGS, MICHIGAN, ASSIGNOR TO CONSOLIDATED PRESS AND TOOL COMPANY, OF HASTINGS, MICHIGAN, A CORPORATION OF MICHIGAN.

NON-REPEATING CLUTCH FOR DIE-PRESSES

No. 902,545.

Specification of Letters Patent.

Patented Nov. 2, 1908.

Application filed May 20, 1908. Serial No. 423,542.

To all whom it may concern:

Be it known that I, JOHN L. ALLEN, a citizen of the United States, residing at Hastings, in the county of Barry and State of Michigan, have invented new and useful Improvements in Non-Repeating Clutches for Die-Presses, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

The purpose of this invention is to provide an improved device of the nature of a clutch and operating means for the same for connecting the fly wheel of a press with the operating shaft thereof, which shall prevent the press from performing more than one action,—that is, prevent the shaft from making more than one complete revolution after being tripped into engagement with the fly wheel without a repetition of the voluntary act of the operator for tripping it into engagement.

It consists of the elements and features of construction shown and described as indicated in the claims.

In the drawings:—Figure 1 is a front elevation of a portion of a die press, comprising the operating shaft, fly wheel and clutch device thereon, embodying this invention. Fig. 2 is a section at the line 2—2 on Fig. 1 showing the parts in their normal position at rest. Fig. 3 is an enlarged detail elevation of the parts shown in Fig. 2 pertaining to this invention, certain casings being partly broken away to disclose the parts within. Fig. 4 is a detail section at the line 4—4 on Fig. 3.

It may be understood that the drawings are intended to represent a die press of ordinary construction in the main features, a particular form of the device for engagement of the fly wheel with the shaft and for tripping the same being necessarily adopted in order to illustrate the application of this invention. The portion of the press standard or frame is shown at A in which is journaled the press crank shaft, B, having the enlargement, B', and on which the fly wheel, C, is mounted loose for rotation, a dog, D, being provided for engaging the shaft and wheel to operate the press. It will be understood that the dog is mounted for sliding relatively to the shaft to become engaged with and disengaged from the fly wheel, being normally shot into

engagement by the spring, not shown, and being forced out of engagement by the tripping cam, F. This tripping cam is pivoted on the bracket, G, mounted upon the press standard, and is provided with a spring-operated plunger, H, for holding it at the free end normally up into the path of the abutment, D', on the dog, D, so that the rotation of the shaft causes the abutment to run on to the tapering end of the tripping cam for wedging the dog out of engagement with the fly wheel to bring the press to rest. It will be understood that in the usual or ordinary construction of such presses, the tripping cam is connected by a rod to the pedal by which it is pulled down out of its position for stopping the abutment, and that by this action the dog is released and allowed to be shot into engagement with the fly wheel which communicates rotation to the shaft and maintains it as long as the tripping cam is thus held down out of the path of the abutment, the engagement of the fly wheel and shaft being effected and the shaft being brought to rest only when the operator releases the pedal and allows the tripping cam to be thrust back by the spring-pressed plunger, H, into the path of the abutment, D'.

The present invention consists of the features now to be described associated with the tripping cam for permitting it to be forced back into tripping position after the wheel completes one revolution, without release of the pedal. For this purpose, the tripping cam, F, is connected with the pull-rod, K, (which may be understood as extending to a pedal, not shown,) by means of a two-part link whose members, M and N, telescope with each other, the upper member M, being connected by a short link, L, with the tripping cam, (such short link being provided merely to accommodate the movement of the tripping cam about its fulcrum to the sliding movement of the telescoping link,) and the lower member, N, of the two-part link being connected with the pull-rod, K. The two members, M and N, of the telescoping link are engaged with each other by a dog, P, lodged in a transversely projecting seat, N', provided on the lower link member, and thrust into engagement with the notch,

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M', in the link member, M, by means of a spring, O. The dog, P, has a projection, p, which is engaged by a trigger, S, fulcrumed on the bracket, G, and extending up between said abutment, p, and the slide bearing of the two telescoping link members upon each other, the upper end of said trigger being in the path of an abutment, B', on the enlargement, B', of the shaft, situated thereon at such point as to encounter the trigger a little before the point at which the disengagement of the fly wheel and shaft should occur for bringing the press to rest.

When the operator by depressing the pedal (not shown) causes the two-part telescoping link whose two parts are locked together by the dog, P, to pull down the tripping cam, the dog, D, engages the fly wheel and shaft in the usual manner and the shaft is rotated, but before the shaft has made one complete revolution, its abutment, B', encountering the trigger, S, causes the latter to pull out the dog, P, and disengage the two telescoping link members from each other, leaving the upper member, M, free to be pulled upward by the tripping cam which is forced upward by its spring-pressed plunger, and the tripping cam being thus returned to tripping position wedges the dog, D, out of engagement with the fly wheel, causing the press to come to rest, notwithstanding the operator may be still holding the pedal depressed and thereby keeping the lower link member, N, withdrawn. In order to cause the press to make another stroke, the operator must release the pedal to let the link member, N, return upward, and in order that it may be thus returned, notwithstanding it is disconnected from the cam, there is provided a spring-pressed plunger, T, operating upon the projecting seat, N', of said lower link member for thrusting it upward. As soon as the lower link member is thus returned upward to bring the notch, M', into line with the dog, P, the latter enters the notch and the two link members are again engaged, and the down-pull of the pull-rod when the pedal is next depressed will withdraw the two-part link and the tripping cam connected therewith downward for permitting the engagement of the fly wheel and shaft by the dog, D.

In order that the trigger, S, may not in any case interfere with reversing the shaft, as is sometimes necessary in manipulating the press, said trigger is not positively connected with the dog, P, which it is designed to operate, but is only arranged to operate it by encounter with the abutment, p, at one side thereof, being free to swing away from the abutment without operating the dog or being restrained by it; and a spring, V, is provided on the trigger to hold it yieldingly

against the abutment, p, of the dog in order to position the trigger definitely as if the two parts were positively connected.

I claim:—

1. In combination with a press shaft and fly wheel, a dog for engaging them; a spring-pressed cam for withdrawing the dog; a two-part link of which one link member is connected with the cam; pulling means connected with the other link member; a dog mounted on one of the link members for engaging the other to lock them together; a trigger for withdrawing said dog and an abutment revolving with the shaft for encountering the trigger to withdraw the dog.

2. In combination with a press shaft and fly wheel, a dog for engaging them; a spring-pressed tripping cam for withdrawing the dog; a two-part link whose members telescope with each other, one link member being connected with the tripping cam; a pull-rod connected with the other link member; a dog mounted on the first-mentioned link member, the second link member having a notch for engagement with the spring-pressed dog to lock the two members against relative extension; a trigger for withdrawing the dog and an abutment revolving with the press shaft for encountering the trigger, and a spring operating on the lower link member for yieldingly resisting the down pull of said member and returning it upward.

3. In combination with a press shaft and fly wheel and the dog for engaging them, a spring-pressed cam for withdrawing the dog; a two-part link of which one link member is connected with the cam; pulling means connected with the other link member, and means by which the two members are disengageably engaged for transmission of the pull on the latter member to the former, said link members being telescoped with each other.

4. In combination with a press shaft, fly wheel and dog for engaging them; a spring-pressed cam for withdrawing the dog; a two-part link of which one member is connected with the cam; operating means connected with the other link member; a dog mounted on one of the link members for engaging the other to lock them together; a trigger engaging the dog only in one direction for withdrawing it; a spring which resists the movement of the trigger in the opposite direction, and an abutment revolving with the shaft for encountering the trigger to withdraw the dog.

5. In combination with a press shaft and fly-wheel, and the dog for engaging them, a spring-pressed cam for withdrawing the dog; a two-part link of which one link member is connected with the cam; pulling means connected with the other link member, said

members being telescoped with each other, the inner member being notched for engagement; a dog carried by the outer member for such engagement, and means operated by the rotation of the shaft for disengaging the dog.

In testimony whereof, I have hereunto set

my hand, in the presence of two witnesses, at Hastings, Mich., this 12th day of May, 1908.

JOHN L. ALLEN.

In the presence of—

GEO. E. COLEMAN,

ARTHUR A. CROTHERS.

Part of Defendants' Exhibit K.
(Letters Patent No. 1,174,750 to B. F. Mayo,
March 7, 1916.)

668

B. F. MAYO.
WORK CLAMP.

APPLICATION FILED JUNE 9, 1910.

1,174,750.

Patented Mar. 7, 1916.

5 SHEETS—SHEET 1.

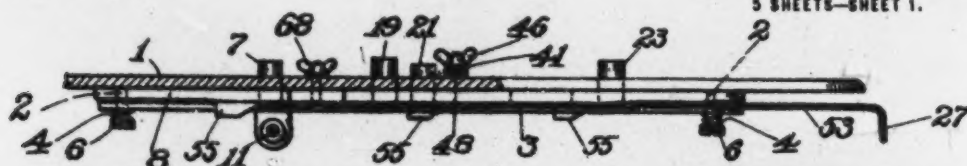


Fig. 6.

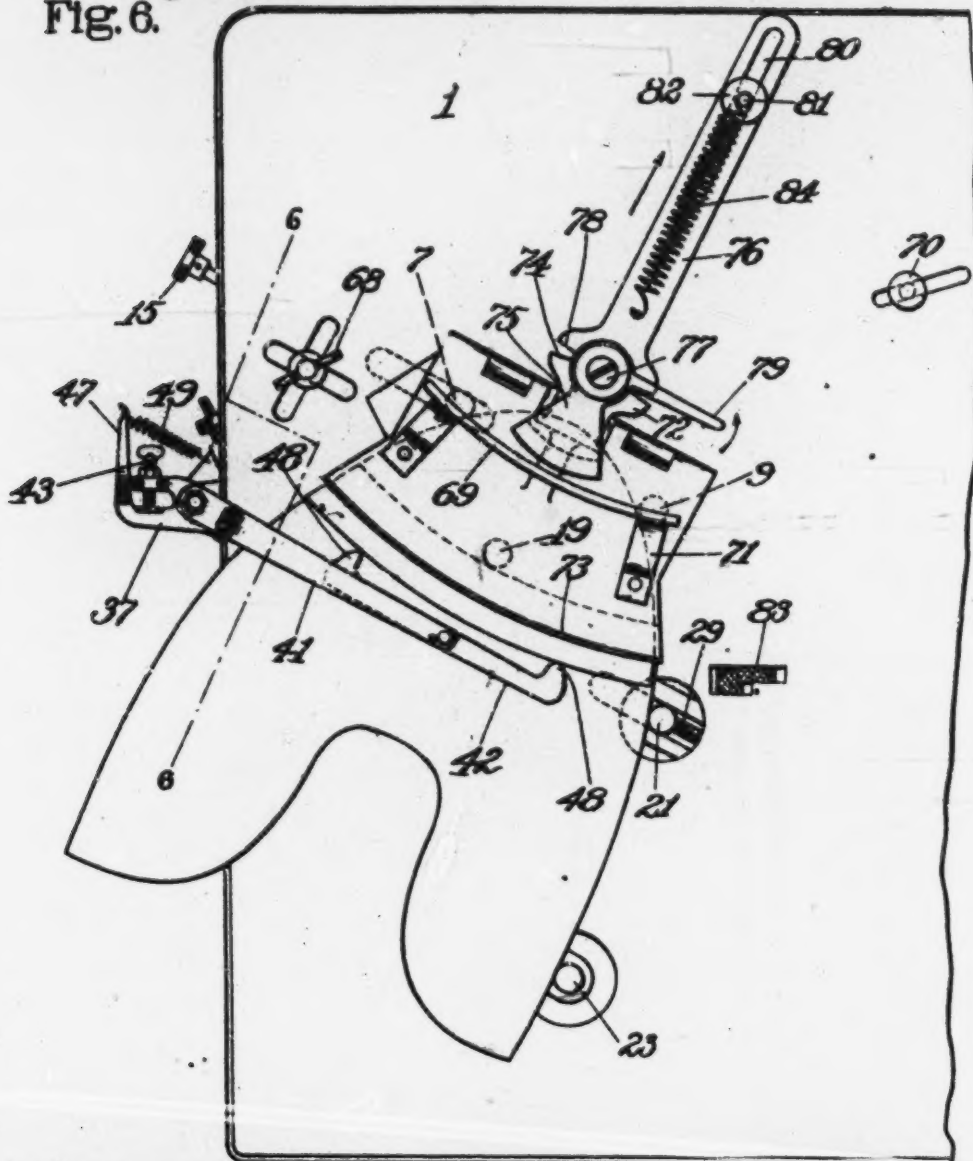


Fig. 1

WITNESSES.

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1,174,750.

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WORK CLAMP.

APPLICATION FILED JUNE 9, 1910.

Patented Mar. 7, 1916

5 SHEETS—SHEET 2.

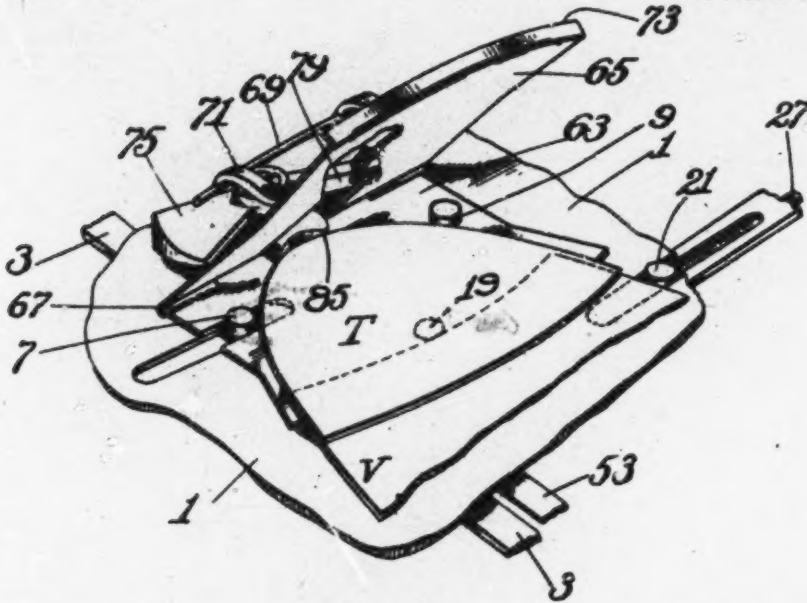


Fig. 2.

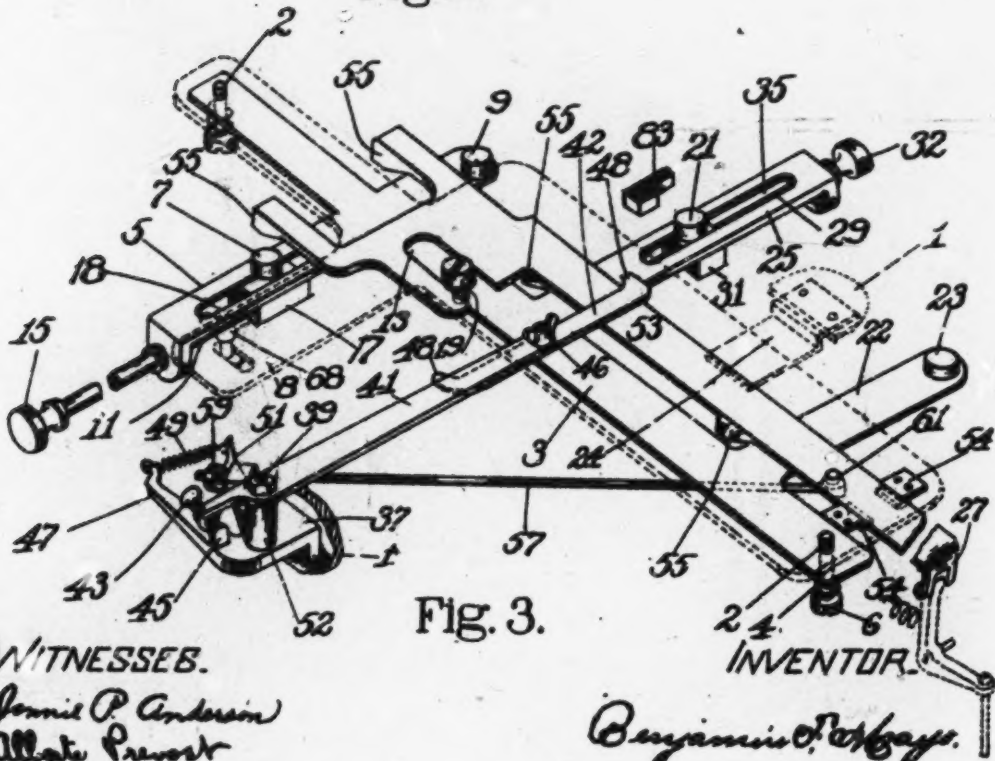


Fig. 3.

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APPLICATION FILED JUNE 9, 1910.

1,174,750.

Patented Mar. 7, 1916.
5 SHEETS—SHEET 3.

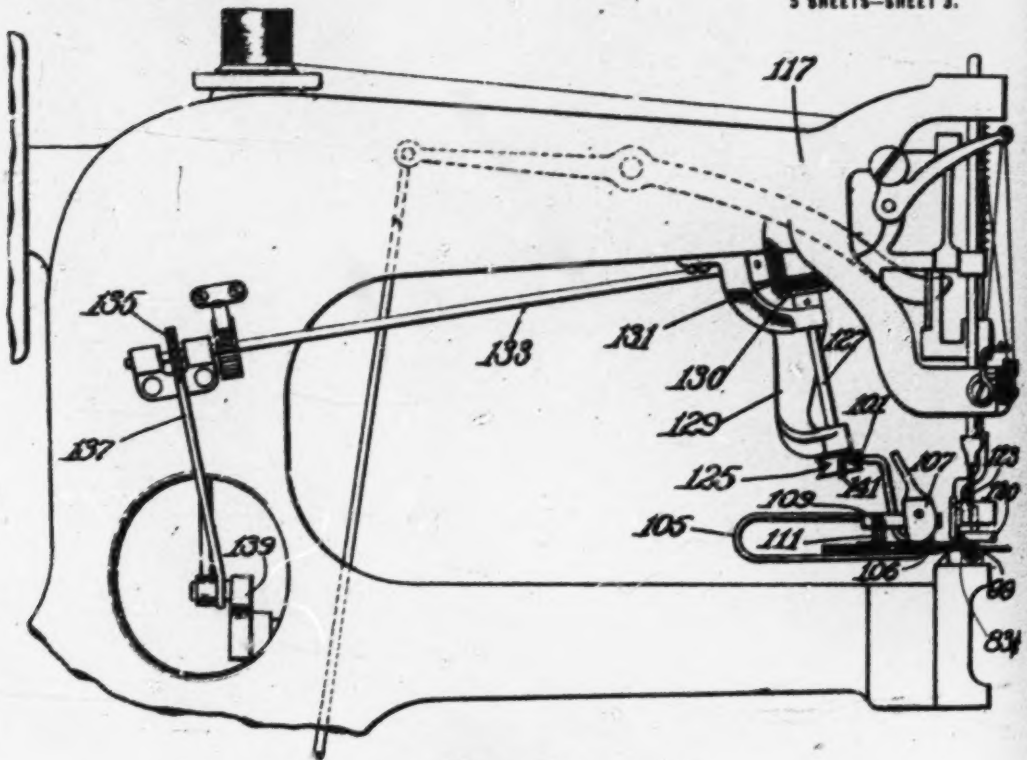


Fig. 5

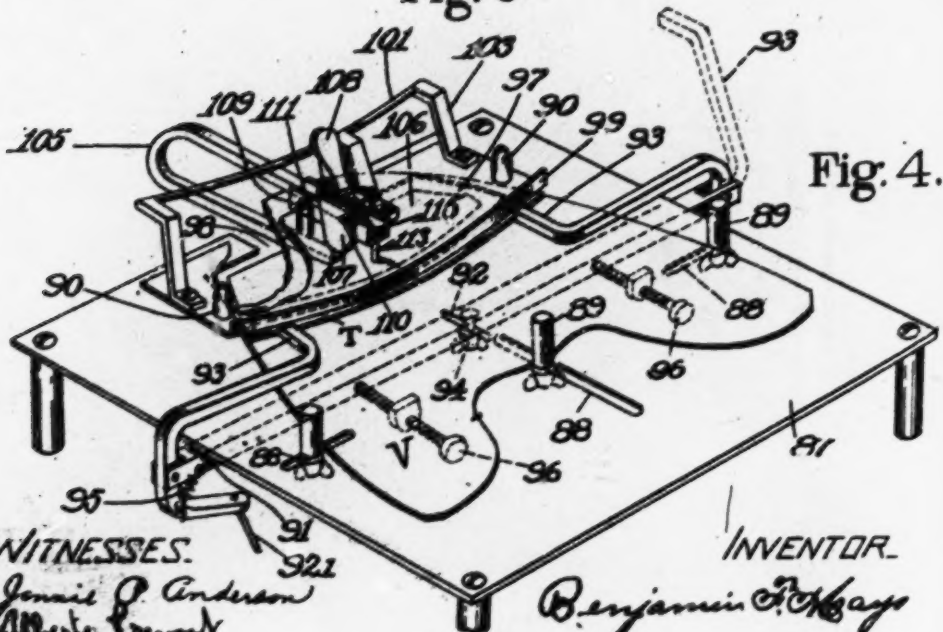


Fig. 4.

WITNESSES.

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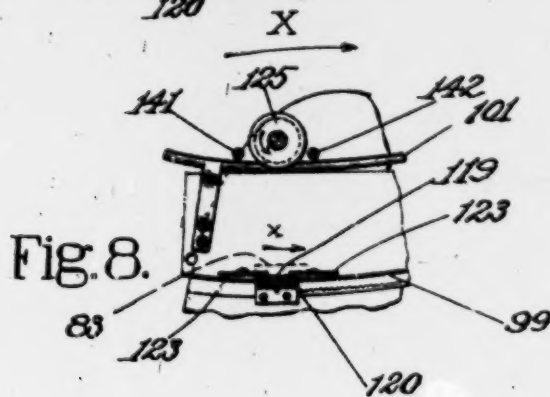
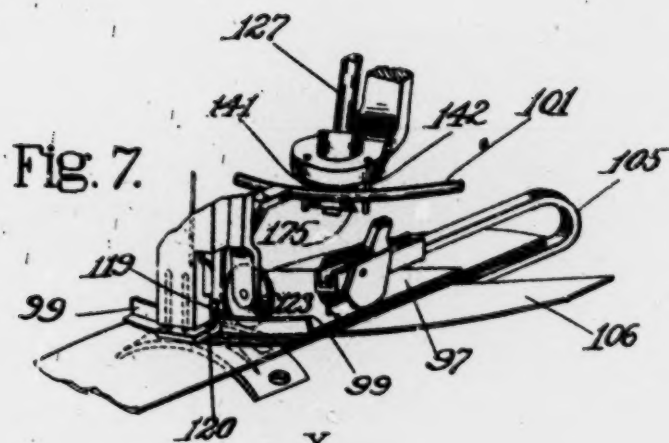
B. F. MAYO.
WORK CLAMP.

APPLICATION FILED JUNE 9, 1910.

1,174,750.

Patented Mar. 7, 1916

5 SHEETS—SHEET 4.



WITNESSES

James P. Anderson
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675

1,174,750.

WORK CLAMP.

APPLICATION FILED JUNE 9, 1910.

Patented Mar. 7, 1916.

5 SHEETS--SHEET 5.

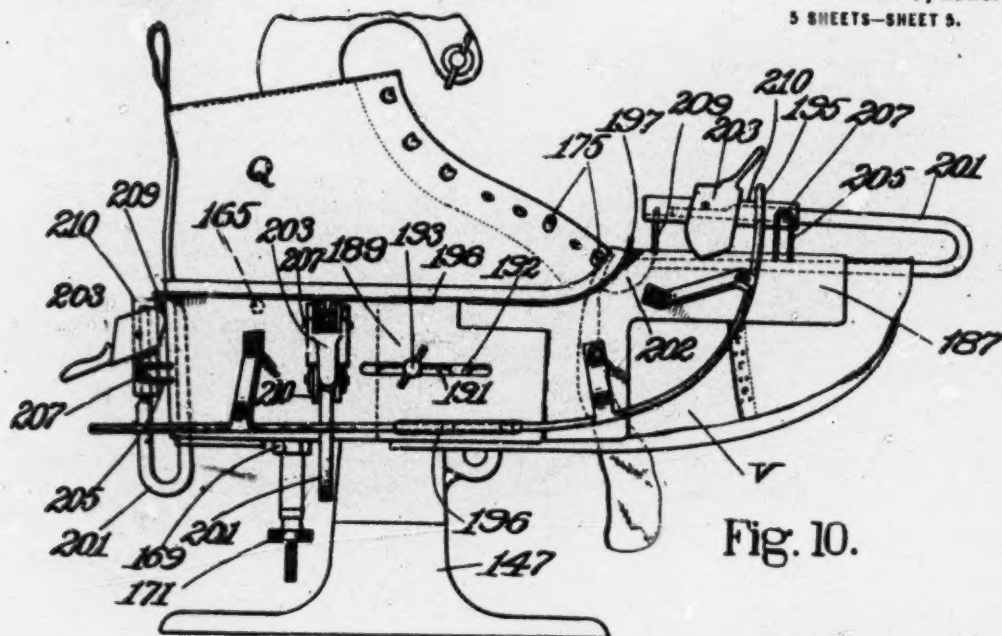


Fig. 10.

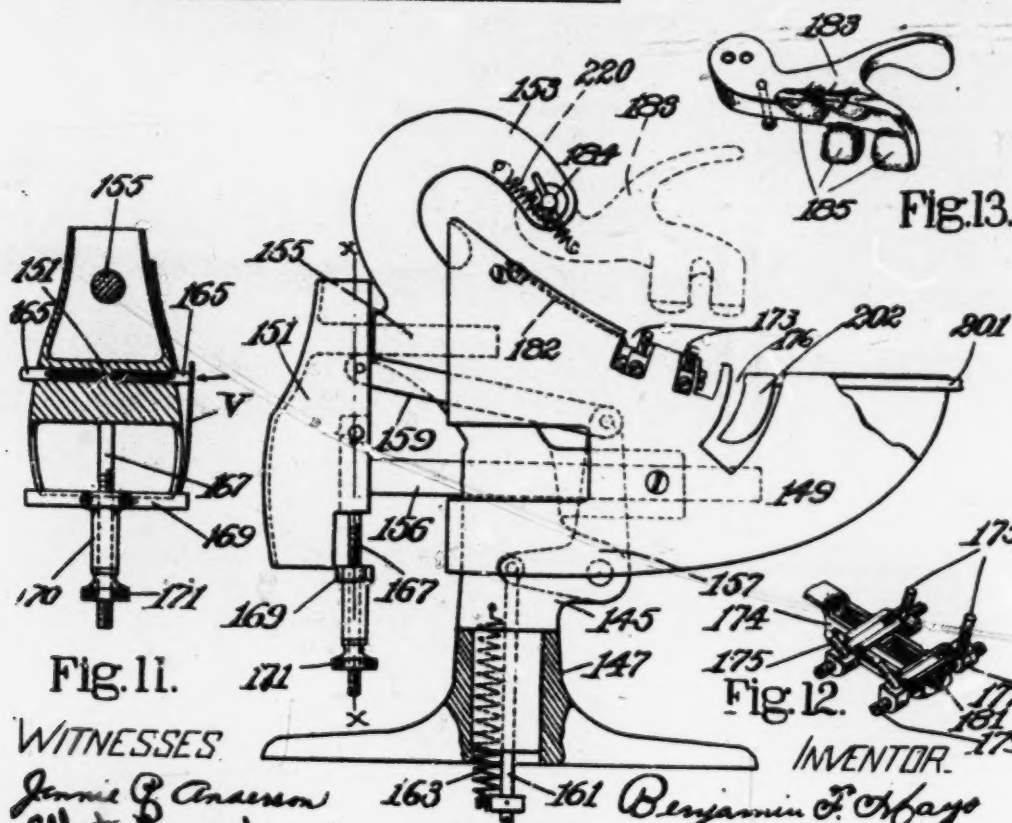


Fig.13.

Fig 12

WITNESSES

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INVENTOR

Benjamin F. Mayo

Fig. 9.

UNITED STATES PATENT OFFICE. 677

BENJAMIN F. MAYO, OF SALEM, MASSACHUSETTS.

WORK-CLAMP.

1,174,750.

Specification of Letters Patent.

Patented Mar. 7, 1916.

Application filed June 9, 1910. Serial No. 563,862.

To all whom it may concern:

Be it known that I, BENJAMIN F. MAYO, a citizen of the United States, residing at Salem, in the county of Essex and State of Massachusetts, have invented certain Improvements in Work-Clamps, of which the following description, in connection with the accompanying drawings, is a specification, like reference characters on the drawings indicating like parts in the several figures.

This invention relates to work positioning and holding devices, and especially to devices of this character which are designed to facilitate the arrangement of two or more pieces of material in appropriate position for being secured together by a line of stitches, or other fastenings, and for reliably holding them in such position during the securing operation.

Where it is proposed to fasten together two or more pieces of material upon any suitable form of machine, as for instance a sewing machine, it is of importance, first, that the several parts which are to be connected shall be properly arranged relatively to each other; and second, that when the proper positions of the parts have been determined that they shall be maintained with certainty therein until after the securing operation has been completed, in order to insure accuracy in the location of the seams.

An important object of the invention is to insure the proper arrangement of the parts of a shoe upper in position for being subsequently connected by stitches, or other permanent fastenings, and after so arranging such parts to hold them firmly in assembled relation during the operation of the sewing, or other fastener-inserting machine, by which they are connected. In the several embodiments of the invention herein selected for illustration the mechanism for positioning and holding the work, and for feeding and guiding it relatively to the fastener-inserting mechanism is constructed especially for operation in connection with the parts of uppers for boots and shoes, and it is with reference to such articles that many features of the invention will doubtless be found to possess the greatest advantages; some features of the invention, however, are obviously of more general utility and the benefits following from their use for assembling

and holding together the parts of other articles than boots and shoes will be apparent. For this reason certain of the claims hereinafter made do not limit the features and combinations to which they are directed to use in connection with the parts of boots and shoes.

Having in view this and other objects, an important feature of the present invention comprises means constructed and arranged for positioning, relatively, two or more parts of an upper to be fastened together, and for temporarily holding such parts as thus positioned during the fastening operation. Preferably, the positioning means referred to are adjustable in order to accommodate the parts of shoe uppers of varying sizes and styles, and, furthermore, in order to properly determine the relative positions that said parts shall occupy to each other before the temporary holding means clamps or otherwise holds them together.

Under one form of the invention, where the positioning means and the holding means are adapted for use in connection with vamps and toe-caps, such positioning means may consist of adjustable gage devices some of which are arranged to engage the edges of a vamp and others to engage an edge of a toe-cap, together with other, movably supported, gage devices having members to cooperate with another edge of the toe-cap; and the holding means may be in the form of a clamp having members to embrace the toe-cap and vamp, all of said parts being adapted for support upon a suitable work table and the adjustable gage devices referred to being arranged for movements to carry them out of the way of the clamp in order to avoid interference therewith as the clamp is moved to present the work to the securing mechanism.

Another feature which may be employed under one form of the invention consists in providing means for automatically carrying the clamped work away from the stitching mechanism of the machine and for unclamping the work at the completion of the sewing operation, in order that the operator may remove the finished work from the clamp and insert other pieces of material therein. The means selected for illustration for the performance of these functions comprises a yielding element, as a spring, which

is connected with the work clamp and its support in such manner as to be under tension during the sewing operation, and an abutment located in the path of a cam lever for operating the clamp. The construction and arrangement of these parts are such that when the guiding device carried by the clamp member, before referred to, escapes from a slot through which it travels in the presser-foot, the said yielding element pulls the clamped work away from the sewing mechanism, and the cam lever comes in contact with the abutment which causes the cam to be operated so as to release the work.

Under another form of the invention, where the positioning means and holding means are for use in connection with the vamps and quarters of shoes, an adjustable form may be employed whose construction adapts it to support these parts, and in connection therewith, I preferably use a carrier having a series of adjustable gage pins to project through the eyeleted openings of the quarters, the lowermost of the pins serving to position the rear edge of the front of the vamp, while the lower edges of the sides of the vamp are supported by an adjustable member which serves to position the upper edges of the vamp relatively to the lower edges of the quarters to which they are to be connected. Other pins projecting from the sides of the form serve to sustain the lower edges of the quarters. In the operation of this embodiment of the invention the parts of the upper are first positioned by the devices referred to, and are then held in such position, preparatory to being sewed together, by a removable clamp which is constructed to be taken from the form and applied to a sewing, or other suitable machine, where the assembled parts of the upper will be joined by a permanent line of fastenings.

Another important feature of the invention lies in the provision of means for accurately feeding and guiding the clamped parts of the work relatively to the fastening mechanism in order that the fastenings shall be placed in a predetermined position with relation to the edges of the work. This feature of the invention preferably comprises two guiding devices to be carried by one of the clamping members, one of which may act solely as a guide, and the other as a combined guide and feeding member. Where a sewing machine is employed to secure the parts of the work to each other, one of the guiding devices referred to may be arranged to enter and cooperate with a slot or guideway between two adjacent parts of the presser-foot, and the other guiding device may be operatively arranged in connection with a suitable feeding mechanism, as a wheel which is preferably to be

driven from the power mechanism of the sewing machine. The peripheral speed of this wheel is sufficient to impart to the guiding device feeding movements which will be faster than those imparted to the work by the ordinary feed-foot of the machine, whereby the clamped work is fed with a tendency to rotate about a center located approximately, at the point where the needle enters the work. A directing and checking device, which may be a pin or equivalent form of abutment, is located to the rear of the feeding wheel and near the guiding device upon which the wheel acts, and said parts are so constructed and arranged that when the speed imparted to the clamp by the feeding wheel is sufficiently greater than that imparted to the work by the feed-foot of the machine to cause the work to move away from its correct line of travel, the said guiding device will press against the directing pin and its engaging pressure with the feeding wheel will be temporarily relieved. This serves to automatically control the feeding of the clamped work relatively to the stitch-forming mechanism, and causes the work to always travel in a direction which will be determined by the shape of the guiding device located in cooperative relation with the presser-foot.

Other features of the invention, including important details of construction and combinations of parts, will be hereinafter more particularly described and claimed.

In the drawings, Figure 1 illustrates, in plan, a portion of a sewing machine work table having applied thereto a form of positioning and holding mechanism, contemplated by the present invention, together with a vamp and toe-cap, the view showing only such parts of the mechanism as appear above the table. Fig. 2 is a detail view showing, in perspective, the gage pins and clamp, with part of a vamp and a toe-cap arranged in position to be clamped together. Fig. 3 is a perspective view of positioning devices for a vamp and a toe-cap and the operating mechanism therefor, as said parts appear when removed from the work-table. Fig. 4 shows, in perspective, a modified form of positioning and clamping mechanism for vamps and toe-caps. Fig. 5 shows, in side elevation, certain parts of a "cylinder" vamp sewing machine provided with feeding and guiding devices to cooperate with some of the forms of work-clamping mechanism contemplated by the present invention, together with a clamping mechanism and the work held thereby in position for sewing. Fig. 6 is a sectional view on the line 6-6, Fig. 1. Fig. 7 is a detail view showing in perspective certain parts illustrated in Fig. 5. Fig. 8 is a sectional plan view of certain parts illustrated in Fig. 7. Fig. 9 is a view in side elevation, partly

sectional, of a modified construction, showing a form for positioning a whole or cylindrical vamp and quarters. Fig. 10 is a view in side elevation of the form shown in Fig. 9, with the parts of a shoe upper located thereon, and showing also the clamping device as they appear when holding a vamp and quarters in position for sewing. Fig. 11 is a view in cross-section on the line $x-x$, Fig. 9. Fig. 12 is a detail view, showing in perspective the gage pins for locating the rear edge of the front part of a vamp. Fig. 13 is a detail view, showing a clamp for holding the uppers of button and other shoes.

Referring to Figs. 1, 2 and 3, the numeral 1 indicates a suitable support, as the work-plate of a sewing machine constructed for securing together the parts of uppers for boots and shoes, and 83 the feed-dog of such machine, which projects through the usual slot therefor in the work-plate.

A plate, 8, shown in Fig. 6, and by dotted lines in Fig. 3, is located below the work-plate and supported therefrom by any suitable means permitting lateral adjustment as, for instance, a bracket, 24, and a bolt having threaded thereon a winged nut, 68, the bolt passing through angularly arranged slots, formed in the work-plate 1, and the plate 8, respectively. (see Fig. 1). A frame, 3, below the plate 8, is secured thereto by means permitting the frame to yield downwardly relatively to the plate, as by the screws, 2, having heads 6, and springs, 4, which are arranged between said heads and the frame. The frame is provided with a transverse arm, 5, which near one end carries a fixed pin, 9, and near its opposite end is slotted, at 18, to receive an adjustable pin, 7. The pin 7, is supported upon a block 17, which may be internally threaded to engage an externally threaded rod, 11, turning freely in the arm 5, and provided at its outer extremity with a peripherally roughened disk, 15, to constitute a handle for turning said rod to move the block 17, and thereby adjust the pin 7, along the slot 18. The frame 3 also carries a fixed pin, 19, located intermediate the pins, 7 and 9, a fixed pin, 23, located upon an arm 22, and an adjustable pin, 21, which is movable in a slot 35, formed in an arm 25. A threaded rod 29, turning freely in the arm 25, engages an internal thread in a block, 31, supporting the pin 21, and is provided at its outer end with an externally roughened disk 32, to constitute a handle, whereby the rod may be turned to effect adjustments of the pin 21 in the slot 35. The pins, 7, 9, 19, 21 and 23, which are for determining the positions of a vamp and toe-cap, as will be hereinafter described, normally project slightly above the work-plate 1, through openings formed therein, the openings for the pins 7 and 21 being in the

form of slots which register with the slots 18 and 35, respectively, whereby to permit the necessary adjustments of these pins to position relatively vamps and toe-caps and to accommodate vamps and toe-caps of different sizes. In positioning short vamps the pin 19 will be employed to cooperate with the front edge of the vamp as indicated in Fig. 2, but in case a full length vamp is being positioned the pin 19 may be removed from the frame 3, and to this end the pin may have a threaded shank to detachably engage a threaded aperture in the frame, as indicated by dotted lines in Fig. 3.

Arranged above the frame 3, and lying between the same and the plate 8, is a bar 53, hereinafter referred to as the depressor bar. The depressor bar may be forked at its rear end, and is preferably provided on its lower surface with a plurality of inclined, or cam-shaped, projections 55, to engage the several arms 5, 22 and 25, of the frame 3, and with a slot, 13, to accommodate the pin 19, and at its forward end with a handle 27, or with a treadle-operating connection comprising a bell-crank lever and rod, as shown by dotted lines. A pair of supporting brackets, 54, having off-set flanges to receive and form guideways for the depressor bar, may be secured beneath the work-plate 1, in order that said bar may be capable of free sliding movements relatively to the frame 3, as will be described hereinafter.

Below the work-plate 1, and suitably secured to a depending ear or flange, or other fixed part thereon, is a bracket, 37, from which projects a stud, 39, to form a pivotal support for an arm, 41, having adjustably secured to its outer end through a screw and winged nut, 46, a gage bar, 42, which at its ends is provided with the projections, 48, adapted for engagement with the rear edge of a toe-cap. The adjustable connection of the gage bar 42 with its supporting arm permits the projections 48 to be properly positioned to accord with the different angles presented by the rear edges of the toe-caps for rights and lefts, in shoes made on crooked lasts. The opposite end of the arm 41, is extended beyond the stud 39, and provided with a threaded opening to receive a stop-screw 43, which is arranged to cooperate with a lug 45, projecting from the bracket 37, and to thereby adjustably limit the movements of the arm on the stud 39. An arm 51, projecting from a sleeve 52, or other rigid connection with the arm 41, is provided with a perforated boss to receive a rod, 57, having at its inner end a thread to which is applied an adjustable thumb-nut, 59, to bear upon the boss, the rod 57 being pivotally connected at its outer end to the depressor bar by a stud or pin, 61.

The extremity of the arm 51 is connected,

preferably through a spring, 49, or other yielding element, with an extension 47, of the bracket 37, the spring acting normally to hold the end of the stop-screw 43, against the lug 45.

The numeral 83 indicates the feed dog of the sewing machine, which is illustrated in Figs. 1 and 3 with a view to showing its location relatively to the devices for determining the position of the vamp and the toe-cap prior to the sewing operation. By reference to these views, it will also be seen that of the parts so far described, the plate 8, the frame 3 carrying the gage-pins and their adjusting devices, and the depressor bar 53, are located beneath the work-plate, while the swinging arm 41 and gage bar 42 are located above the work-plate.

The numeral 63 indicates the lower, and 65 the upper member of a clamp, said members being, in the embodiment of the invention shown in Figs. 1 and 2 of the drawings, connected at their rear edges by a hinge 67. The lower clamp member is designed to rest upon the work-plate, or other support, and is provided with openings to permit the passage of the pins 7, 9 and 19, the opening for the pin 7, being in the form of a slot, as shown, in order to permit the necessary adjustments of this pin. Said member may also, as shown in Fig. 2, be provided with an end gage 85, to cooperate with the pins 7, 9, in determining the position of a toe-cap. The upper clamping member, in the form of the invention being described, preferably has secured thereon suitable brackets, 71, to support a curved guide 69, shown in the form of a bar, and at a point forward of this bar the member carries a second guide, 73, herein shown as being formed by turning up a flange upon the curved rear edge of the member. These guides are shown as curved on arcs of circles of different radii, but which are generated from a common center located preferably at a point on the work-plate a suitable distance in front of the clamp, and about which the clamp carrying the work swings when the work is being fed to the stitch-forming mechanism. In Fig. 1 the lower member of the clamp is shown as having a forwardly extending boss, 72, formed with stop-shoulders, 74, to be connected for a limited amount of pivotal movement with an arm 76, by a screw-stud, 77. The arm 76, is formed with shoulders, 78, to cooperate with the shoulders 74, and with a slot, 80, to receive a stud, 81, projecting rigidly from the work-plate and carrying a washer 82, for confining the arm 76 thereto. A spring, 84, which is attached at one end to the forward part of the arm, and at its other end to the stud 81, acts with a normal tendency to draw the arm and clamp in the direction of the arrow, Fig. 1, for purposes to be hereinafter fully explained. A cam

75, having a handle 79 projecting rigidly at a suitable angle thereto, is pivotally sustained upon the stud 77. The construction of this cam is such that when it is turned in a direction to engage the upper clamp member, as shown in Fig. 1, said member will be moved forcibly into engagement with the lower member, or with a vamp and toe-cap located between the members in order to hold such parts in position to be stitched together; and when the cam is turned in the opposite direction, as shown in Fig. 2, the upper clamp member will be free to move away from the lower clamp member, and the work may be removed therefrom. A stud 70, which is mounted for a suitable amount of adjustment in a slot provided in the work-plate, as shown, is designed to serve as an abutment for the handle 79 of the cam to cause the cam to turn for automatically releasing the work from the clamp at the completion of the sewing operation.

Fig. 2 shows the upper member of the clamp in raised position above the lower member to permit a vamp and a toe-cap to be inserted therebetween. In positioning said parts, with the construction described, the vamp V is first located properly by means of the pins 19, 21 and 23, and the toe-cap T is then placed on the vamp and located between the pins 7, 9, and the gage projections 48, the carrying arm 41 swinging forward under the influence of the spring 49 upon release of the handle 27, or the treadle connection with the bar 53, and thereby causing said projections to engage the rear edge of the toe-cap. The handle 79 may then be turned in a direction to cause the cam to force the upper clamping member toward the lower member and clamp the vamp and toe-cap firmly together in correct position for the sewing operation. The depressor bar 53, is then moved in a rearward direction which causes the cams 55 to depress the frame 3, and the positioning pins are carried thereby below the surface of the work-plate 1, which also swings the arm 41 and gage bar 42 to the rear, so that said parts are out of the way and cannot interfere with the operation of feeding the clamped work to the stitching mechanism of the machine. The downward movement imparted to the frame 3 compresses to a slight degree the springs 4, which react and restore the frame to its former position when the depressor bar is moved reversely preparatory to the insertion of another vamp and toe-cap between the clamping members.

Referring to Fig. 4, which shows a modified construction of the positioning and holding devices for a vamp and toe-cap where such devices are carried by a support independent of the sewing machine, a work table, 87, is formed with slots, 88, 130

to receive the shanks of the pins 89, upon which may be threaded winged clamping-nuts, as shown in dotted lines, for securing such pins adjustably in position upon the table. The two outer pins 89 are arranged to engage the side edges of a vamp, while the central pin engages the throat and thereby determines its position, the adjustments afforded by the slots enabling the pins to be positioned for vamps of different sizes, as well as for enabling a vamp to be properly positioned relatively to a toe-cap. The pins 90, which also project above the work-table, are arranged for coöperation with the side edges of a toe-cap and a vamp, and if so desired these pins might be adjusted in like manner and for the same purposes as the pins 89. A supporting bar 91 is located below the work-table and sustained therefrom, preferably by means permitting adjustment, such as a bolt, 94, movable in a slot 92 in the table, and having threaded thereto a winged clamping nut, as shown by dotted lines. The ends of the bar are illustrated as forked to receive the movable gage arms 93, which are pivoted to the bar, and springs 95, or other yielding means, connect the gage arms and bar and serve to normally hold the gage arms elevated above the table, as indicated by dotted lines, in order to permit the introduction and removal of the work. The gage arms are shown as being first bent so as to extend toward each other and transversely of the vamp which is positioned between the pins 89, and then bent at their ends in a forward direction to coöperate with the rear edge of the toe-cap which is being positioned relatively to the vamp. A rod 921, is provided to connect the lower ends of the gage arms with a treadle or similar operating device, whereby the gage arms can be moved from inoperative to operative position, in a manner which will be obvious without further description. The bolt 94 affords a pivotal connection for the bar 91 with the work-table, whereby said bar may swing laterally in either direction to position the gages 93 in accordance with the different angles to the median line presented by the rear edge of the toe caps, for right and left vamps, respectively, in shoes made on crooked lasts. Set screws, 96, which are in threaded engagement with posts projecting from the under surface of the work table, serve to position the bar at the proper inclination and to hold the bar and gages in any pre-determined relation to the rear edge of a toe-cap, according to its "swing". In the case of a vamp and toe-cap for a shoe which will be made on a straight last, where the rear edge of the toe cap lies substantially at right angles to the median line, the adjustment of the bar 91 on its pivot by the set screws will be such as locate and

hold the bar rigidly in position to accord with the rear edge of such toe-cap. The clamp, under this embodiment of the invention, comprises a curved spring bar, 105, whose lower limb carries a curved plate, 106, preferably formed of resilient material, as sheet steel, and arranged with its concave side uppermost, as shown in Fig. 7, and a plate 97, to coöperate therewith. The plate 97 supports two suitably spaced staples, 111, only one of which is shown, and a pin 113. A grooved head, 115, is located between the staples and provided with projecting pins, 109, which are guided between the limbs of the staples, and with a longitudinal slot to receive the pin 113, as shown. By this construction the slotted head 115, is loosely confined to the plate, 97, in a manner to permit it to move vertically in relation thereto. A cam, 107, having an operating handle, 108, is pivotally connected with the head 115, by a pin, 110, which passes transversely through the central groove in the head and serves the two-fold purpose of connecting the cam to the head and forming an abutment or stop for the end of the upper limb of the spring bar, 105, when the same is inserted in the groove of the head, the end of the bar being formed with a shoulder to coöperate with said pivot, as shown by dotted lines in Fig. 4. The work-table 87 is preferably formed with a slot or opening 98 to permit the plate 106 to pass therethrough in removing the clamped work from the table. The rear edge of the plate 97, is preferably bent upwardly to form a guiding flange, 99, and brackets, 103, are rigidly secured to the plate and support a curved guide bar, 101, which is located a suitable distance in front of the flange 99. The plate is also provided with openings to receive the pins 90 in order that it may be placed thereover after the proper relative positions of the vamp and toe-cap have been determined by the gage pins 89 and 90, and the gage arms 93. In the operation of the construction now being described, the gages 93 being in raised position, a vamp is laid on the work-table and located properly thereon by the pins 89 and 90, and the gages 93 are lowered to the position shown in Fig. 4. A toe-cap is then placed over the vamp, its side edges are located between the pins 90, and its rear edge against the ends of the gages 93. The spring bar is then placed in position with the plate 106 beneath the vamp and the upper limb of the bar in the groove of the head 115 with its shoulder abutting against the pivot pin 110. The handle of the cam 107 may now be turned which clamps the vamp and toe-cap between the plates 97 and 106, the latter yielding and becoming flattened under the pressure, and the parts thus being held by a yielding pressure in their

proper relations to be subsequently united by the stitching mechanism of the sewing machine.

Referring to Figs. 5, 7 and 8, which represent certain parts of a cylinder vamp sewing machine constructed for uniting vamps and toe-caps, the head 117, is provided with the usual stitching mechanism including a reciprocating needle bar, a thread supply and tension mechanism, a presser-foot, and a feed-dog, and with certain additional devices especially designed for guiding and feeding the clamping devices holding a vamp and toe-cap which have been previously positioned for sewing, as above described. The presser-foot comprises two parts, 119, 120, which are so spaced apart as to provide a slot or guide-way, as shown, for receiving and guiding the flange on the upper clamp member, and two anti-friction wheels, 123, are preferably rotatably supported from brackets rigid with the head, and arranged on opposite sides of said slot in position to bear upon said clamp member and to assist in guiding it. To the rear of this presser-foot the head of the machine supports a bracket 129, provided with bearings for a shaft 127, which at one end has fast thereon a grooved feed roll, 125, and at its opposite end carries a bevel gear 130, meshing with a bevel gear 131, fast on a shaft 133, mounted in bearings sustained in suitable manner from said head. Two pins, 141 and 142, are supported from the bracket 129 and extend adjacent to the periphery of the roll 125, as best shown in Figs. 7 and 8. The shaft 133 is designed to be rotated through any suitable devices operatively connected with the power shaft of the machine, and in the present instance I have shown for this purpose a ratchet 135, fast on the shaft 133, to which a step-by-step movement is imparted by a pawl 137, which may be reciprocated by a crank arm 139, secured to the main shaft, or other rotating part. This mechanism is arranged to rotate the feed roll 125 at a sufficient speed to impart feeding movements to the work which will be faster than the feeding movements imparted thereto by the feed-dog 83.

In the operation of sewing together a vamp and toe-cap which have been previously assembled and clamped in proper relation by the devices shown in Figs. 1, 2 and 3, it is to be observed that in Fig. 1 the parts occupy a position slightly removed laterally from the stitching mechanism. When the depressor bar is moved to the rear to withdraw the pins carried by the frame 3 from the path of the work, and to swing the arm 41 and gage bar 42, back and out of the way, the operator pulls the clamp toward him, slightly stretching the spring 84, and introduces the end of the flange 73,

in the slot between the members 119 and 120 of the presser-foot, as shown in Fig. 8, and places the guide bar 69 in engagement with the feed roll 125. The work is then fed through the machine by the combined action of the feed-dog 83, and the roll 125, and is guided by the flange 73 and the bar 69, the clamp being caused to swing about the stud 81 as a center, and the seam produced by the stitching mechanism following a curve which is parallel with the rear edge of the toe-cap. The action of the feed roll on the bar 73 tends to keep the bar in sliding contact with the pin 141, owing to the fact that the roll feeds faster than the feed-foot and thereby tends to rotate the clamped work in the direction of the arrow X, Fig. 8, about a center located, approximately, at the point where the needle enters the work, such action being permitted by the pivotal connection, 77, between the clamp and the arm 76, Fig. 1. If the feeding movement imparted by the roll 125 increases beyond that desired to properly feed the work, the bar 101 will be forced against the pin 141 with sufficient pressure to cause the bar to be lifted slightly from the groove in the feed roll, thereby permitting the roll to slip on the bar, and retarding the movement of the latter until the action of the feed dog again causes a reengagement of these parts and the normal feeding operation thereof is resumed. The clamp and work are thus caused to move in a predetermined line, and any tendency of these parts to depart from this line will be automatically corrected in the manner described. When the end of the seam is reached, the flange 73 will escape from the slot in the presser-foot, and the spring 84 will automatically move the clamped work out of the way of the stitching mechanism, in such movement causing the handle 79 to come in contact with the stud 70, to thereby unlock the clamp and release the work. The clamp may then be moved to the position shown in Fig. 1, preparatory to assembling and clamping together another vamp and toe-cap.

The work clamping devices shown in Fig. 4 are to be guided and fed through the sewing machine in the same manner as in form just described, the flange 99 being first introduced in the slot between the parts of the presser-foot and the bar 101 located in the groove of the feed roll, as clearly shown in Figs. 5, 7 and 8, where these parts appear in the positions which they occupy during the formation of a seam to unite a vamp and toe-cap.

Referring to Figs. 9 to 13, inclusive, which illustrate an embodiment of the invention designed for positioning and holding together a cylinder vamp and quarters, the base or pedestal, 147, supports a form

comprising a fore-part, 149, and a heel part, 151, said parts being preferably rotatably supported on the base. The heel part is shown as being provided with guide rods 153, 156, to slidably engage suitable ways in the fore-part and thereby permit longitudinal adjustments of the heel part, and a bell-crank lever, 157, having one end connected by a link, 159, with the heel part and its other arm connected by a rod, 161, or the like, with a treadle, serve as a means for moving the heel part rearwardly. The heel part is moved forwardly by any suitable means, as, for instance, a spring 163, which may be connected at one end to the rod 161, and at its other end to a fixed point on the bore part, as shown. At suitable points in the sides of the heel part, openings are formed to slidably receive the pins 165, which are normally projected beyond the surface thereof by yielding means, as springs. An externally threaded rod, 167, is rigidly connected with the heel part and projects downwardly therefrom, and a bar 169 having a sleeved-extension, 170, to fit said rod, is arranged below the heel part and adjustably sustained relatively thereto by a thumb-nut 171, which is in threaded engagement with the rod. The fore part is formed with openings, 173, through which project positioning pins, 175, carried by transversely slidable blocks, 177, which are arranged for adjustment in a frame, 174, by the reversely threaded screws, 179. This frame is shown as being provided with an extension, 182, which may be attached to the fore part by a screw, as shown by dotted lines in Fig. 9. The fore part may also be formed or provided with an arm, 153, to whose extremity is connected by a clamping bolt, 184, a clamp 183, carrying spaced arms, 185, covered with some soft material and adapted for engagement with the lower front portion of the quarters of a button boot or shoe to hold the same in position on the form. The clamping members 187 and 189 are arranged to be placed over the parts of the form, and the shape of these members is such that they will snugly fit over a vamp placed on the form, as shown in Fig. 10. In order that the clamp members may be capable of longitudinal adjustment to accommodate vamps of different sizes, their ends are arranged to overlap at a point located preferably about midway of the form, and one of the members is provided with slots, 191, and the other member with clamping bolts 193, to enter the slots and with winged nuts engaging the bolts, whereby the members may be held in their different positions of adjustment. A stud 192, extending from a point near each end portion of the member carrying the clamping bolts, and respectively entering the slots 191, serve, in connection with the bolts 193, to maintain

the two members of the clamp in parallelism during such adjustments. The clamp members are preferably provided with brackets, or other suitable supports for a guide bar 195, which is divided at a suitable point and has its ends connected by a telescopic or similar sliding joint, 196, and a guiding flange, 197, which is similarly divided and has its ends arranged to overlap, as shown at 198, is also supported from the members, the flange being preferably located, approximately, at the uppermost edge of the members, as will be seen in Fig. 10. The described constructions of the bar 195 and flange 197 permit longitudinal relative movements of these parts as the clamp members upon which they are carried are being adjusted, without disturbing their relation to said members, and in a manner that will be readily understood. A plurality of spring bars 201, having substantially the form of the spring bars 105 heretofore described, are arranged to cooperate with the clamp members 187, and 189, in holding the vamp and quarters in position to be sewed together after they have been assembled on the form. These bars are each constructed at one end for detachable engagement with a slotted head, 210, which is held and guided in proper relation to the clamp member by a pin, 209, extending from said member and entering a slot or opening in the head, and by other pins, 207, projecting laterally from opposite sides of the head, and movable between the arms of staple-shaped guides 205, supported by the clamp member. A cam 203, is connected pivotally with the head and constructed and arranged for engagement with the clamp member to force the lower limb of the spring bar against certain parts of the vamp and quarters in order to clamp them firmly between the limb of the bar and the clamp member. Preferably, a spring bar carrying a cam as described is located at the center of the fore part, at the center of the heel part, and upon opposite sides of the vamp between the ends thereof, in order to clamp the vamp and quarters to each other at suitably spaced points, as shown in Fig. 10. The spring bar which is located at the fore part is shown as having its lower limb provided with a bearing plate 202, which is designed to engage the lower extremities of the extreme front edges of the quarters, and to cooperate with the rear edge of the clamp member 187 at this point in clamping the vamp and quarters tightly together. To accommodate this plate, the form is constructed with the opening 176, as shown in Fig. 9.

In the operation of assembling and clamping together a vamp and quarters with the devices comprehended in this embodiment of the invention, the parts of a

shoe quarter are placed on the form with their lower edges resting on the pins 165, and the pins 175 are inserted in eyelet holes near the lower front edges of the quarters, as shown in Fig. 10, which properly locates the quarters on the form. The rod 161 is then depressed to the desired degree by a foot treadle, or other suitable means, which, through the described connections, moves the heel part of the form to the rear sufficiently to straighten the quarters and smooth out all the wrinkles. A vamp, with the rear or heel portion sewed up, is then placed over the quarters and positioned on the form with its lower edges resting upon the bar 169, (see Fig. 11), and the operator pulls the vamp at the toe in a forward direction to straighten out the vamp, particularly along the upper edge. Prior to this step in the assembling operation the quarters were supported upon the pins 165 which served to locate their lower edges properly with respect to the upper edges of the vamp in order to provide the proper amount of overlap. The act of pulling forward the vamp at the toe causes the vamp to hug the sides of the form tightly and forces the pins 165 in against their springs, whereby the overlapped portions of the vamp and quarters are permitted to contact with each other in the proper relation. The clamping members 187, 189, are then placed over the vamp and quarters as shown in Fig. 10, the spring bars 201 are inserted in position, and the cams 203 operated to tightly clamp the vamp and quarters between the lower limbs of the spring bars and said members, the operator turning the form on its base during such operations in order to present the same in the most convenient position for the several described manipulations. It will be observed that the ends of the inner limbs of the spring bars and the adjacent cooperating edge of the clamping members clamp together the overlapped edges of the vamp and quarters after these parts are properly positioned on the form. All of these parts of the clamp, together with the work, may then be removed from the form, which is provided with suitable vertical openings to permit the free passage of the bars 201 therefrom in an upward direction. The work as thus positioned and held together is now ready for application to the sewing, or other fastening inserting machine, whose construction and mode of operation in connection with this embodiment of the invention may be substantially like that described for the forms of positioning and clamping devices illustrated in Figs. 1, 2, 3 and 4 of the drawings.

No specific claim is made herein to the construction illustrated in Figs. 9 to 13, in-

clusive, as the same is claimed in a divisional application filed September 19, 1914, Ser. No. 862,204.

Where the positioning and clamping devices are used in connection with vamps of button shoes, the quarters may be buttoned at the lower portion thereof, the pins 175, inserted in the ends of a suitable number of the button holes, the clamp 183 lowered into a position to properly engage the upper and hold it, and a spring 220, (see Fig. 9) having one end secured to the arm 133 and its other end secured to the clamp at a suitable point beyond the bolt 184, may be employed to hold the clamp raised above the form, or in clamping position upon the upper, as desired.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:—

1. In a device of the class described, the combination with a work support, of means constructed and arranged to determine, preparatory to a securing operation, relative positions of parts of a shoe upper having edge portions overlapped in substantial parallelism and having body portions extending in opposite directions from the overlapped edge portions, and means for holding said parts of the shoe upper with their edge portions in said overlapped relation during the securing operation.

2. In a device of the class described, the combination with a work support, of gages for determining the relative positions of a vamp and toe-cap preparatory to securing said parts together, and means for holding said parts in assembled relation arranged for movement to present said parts to a securing mechanism.

3. In a device of the class described, the combination of a work support, gages cooperating therewith and arranged to determine the relative positions of a vamp and a toe-cap, and a clamp associated therewith for holding the vamp and toe-cap in assembled relation during the operation of securing said parts together on a machine.

4. In a device of the class described, the combination of a work support, gages arranged to determine the relative positions of a vamp and a toe-cap, means associated therewith for holding the vamp and toe-cap in assembled relation during the operation of securing said parts together on a machine, and means carried by said holding means for guiding the work relatively to the securing mechanism.

5. The combination with means for arranging a plurality of pieces of material in position to be secured together, of means for holding said material in such relation during the securing operation, and means for automatically releasing the material

from the holding means at the completion of the securing operation.

6. In a device of the class described, the combination of a work support, devices for determining the relative positions of a plurality of pieces of material, means associated therewith for clamping the material together and movable over said support as the material is fed to a securing mechanism, and mechanism for removing said devices from the path of said means.

7. In a device of the class described, the combination of a work support, gage devices arranged to engage the edges of a plurality of pieces of material and determine their relative positions, and a clamp also sustained by said work support and arranged for operation to hold together the pieces of material whose relative positions have been determined by said gage devices.

8. In a device of the class described, the combination of a work support, gages constructed and arranged to determine the position of a plurality of parts of a shoe upper with their edges in overlapped relation prior to being secured together by a line of fastenings, and a clamp constructed and arranged to act upon the parts of the upper after they are assembled and to hold them together during the securing operation.

9. In a device of the class described, the combination of a work support, adjustable gages arranged to determine the position of a plurality of pieces of material with their edges in overlapped relation prior to being secured together by a line of fastenings, and a clamp constructed and arranged to act upon the pieces of material after they are assembled and to hold them together during the securing operation.

10. The combination of a work support, gages arranged to determine the relative positions of a plurality of pieces of material, a clamp for holding said material in assembled relation and arranged for movement relatively to a securing mechanism, and means for removing said gages from the path of said clamp.

11. The combination of a work support, movable gages arranged for coöperating with the side edges of a vamp and a toe-cap, and with the rear edge of said toe-cap, respectively, and a clamp for engaging the vamp and toe-cap when positioned by said gages, said clamp being movable with the work away from the gages to enable the work to be presented to a securing mechanism.

12. The combination of a work support, movable gages arranged for coöperation with the side edges of a vamp and toe-cap, and with the rear edge of said toe-cap, respectively, a clamp for holding the vamp and toe-cap together and movable in a path

to present said parts to a securing mechanism, and means for withdrawing said gages from operative position after the vamp and toe-cap have been assembled.

13. The combination with a work support, of a plurality of gages adapted for relatively positioning pieces of sheet material thereon that are to be united by a seam, said gages being arranged for movement whereby they may be projected above the surface of the work support or be withdrawn therefrom, and means for simultaneously moving all of said gages into or out of operative relation.

14. The combination with a work support, of a yieldingly sustained frame carrying gages which normally project above the work support, and controlling means for said frame arranged to cause the withdrawal of the gages from operative position.

15. The combination of a work support, a plate, a frame yieldingly supported from said plate and carrying gages to normally project above the work support, and means for depressing said plate to cause the withdrawal of the gages from operative position.

16. The combination of a work support, a frame yieldingly sustained therefrom and carrying gages to normally project above the work support, and a member provided with devices to act on said frame and arranged for movement to cause the gages to be withdrawn from operative position.

17. The combination of a work support, a frame, carrying gages to normally project above the work support, said gages being arranged to determine the relative positions of a vamp and toe-cap, and means permitting adjustment of the gages.

18. The combination of a work support, a frame yieldingly sustained therefrom and carrying gages to normally project above the work support, and a member arranged above said frame and provided with cams to act thereon, whereby movement of said member will depress the frame and cause the gages to be withdrawn.

19. The combination with a work support, of gages to coöperate with the side edge of a vamp and a toe-cap, and a gage to coöperate with the rear edge of the toe-cap arranged for movements into and out of operative position.

20. The combination with a work support, of gages to coöperate with the side edge of a vamp and a toe-cap and arranged to be withdrawn below the work support, a gage to coöperate with the rear edge of the toe-cap and arranged to swing rearwardly to clear the work, and means for simultaneously operating said gages.

21. The combination with a work support, of means to coöperate with the side edge of a vamp and a toe-cap and means to

coöperate with the rear edge of the toe-cap to position said parts, said means being movable into and out of operative position, and a clamp arranged to hold the work together after it is positioned and movable to present it to a securing mechanism.

22. The combination of a work support, a frame carrying side gages to normally project above the work support, a pivotally supported arm arranged above the work support and carrying a back gage, a reciprocating member, and means whereby the movement of said member simultaneously causes the depression of said frame and the movement of said arm to remove the gages from the path of the work.

23. In a device of the class described, the combination of a work support, a frame movably sustained therefrom and carrying gages to project above the work support and coöperate with the side edges of a vamp and toe-cap, an arm supported for swinging movements above the work support and carrying a gage to coöperate with the rear edge of the toe-cap, a bar below said work support having cams to engage said frame, a connection between said arm and bar, and means permitting the operation of said bar to cause a depression of the frame and a backward movement of the arm whereby said gages are removed from the path of the work.

24. In a device of the class described, means for determining the position of the rear edge of a toe-cap comprising, in combination, gage devices and means for moving said gage devices toward and from operative position.

25. In a device of the class described, means for determining the position of the rear edge of a toe-cap comprising, in combination, an arm carrying gage devices, yielding means for moving said arm into operative position, and manually-controllable means for moving said arm out of operative position.

26. In a device of the class described, means for determining the position of the rear edge of a toe-cap comprising, in combination, gage devices arranged for movements into and out of operative position, means for moving said gage devices into operative position, and means for adjustably limiting the extent of said movement.

27. In a device of the class described, means for determining the position of the rear edge of a toe-cap comprising, in combination, an arm carrying gage devices and arranged for movements into and out of operative position, yielding means for moving said arm into operative position, and means for adjustably limiting the extent of said movement.

28. In a device of the class described,

means for determining the position of the rear edge of a toe-cap comprising, in combination, gage devices, yielding means for moving said gage devices into operative position, means for adjustably limiting the extent of said movement, and manually-controllable means for moving said gage devices out of operative position.

29. In a device of the class described, means for determining the position of the rear edge of a toe-cap comprising, in combination, a support, an abutment thereon, an arm pivoted to the support and carrying gage devices on one side of its pivot and an adjustable stop device on the other side thereof arranged to contact with said abutment, yielding means acting on said arm to hold the stop device against the abutment, and manually-controllable means to move the arm in opposition to said yielding means.

30. In a device of the class described, means for determining the position of the rear edge of a toe-cap comprising, in combination, an arm movable toward and from operative position, and a gage device connected therewith by means permitting adjustment to agree with the rear edges of toe-caps presenting different angles to the median line of the shoe.

31. In a device of the class described, means for determining the position of the rear edge of a toe-cap comprising, in combination, an arm movable toward and from operative position, and a gage carrying projections to engage the toe-cap and secured adjustably to the arm to conform with the desired angles to the median line presented by the rear edges of different toe-caps.

32. In a device of the class described, the combination with means constructed and arranged for determining, preliminary to a sewing operation, relative positions of parts of a shoe upper having edge portions overlapped in substantial parallelism and having body portions extending in opposite directions from the overlapping edge portions, of a clamp arranged to engage said upper parts while they occupy the relation determined by said positioning means.

33. In a device of the class described, the combination with means constructed to determine the relative positions of parts of a shoe upper preliminary to the operation of uniting said parts by a line of fastenings, of a clamp for the assembled work, fastening mechanism, and means associated therewith and arranged to coöperate with said clamp in feeding the work relatively to said mechanism.

34. In a device of the class described, the combination of a work support, means for positioning the work, a clamp for holding the work, and means connecting said work

support and clamp arranged to permit the clamp to move from said positioning means to a fastening mechanism.

35. In a device of the class described, the combination of a work support, means for positioning the work, a clamp for holding the work provided with a curved guide, and means for supporting the clamp for pivotal movement about a center corresponding with that from which the curve of said guide is generated.

36. In a device of the class described, the combination of a work support, a clamp for holding the work provided with a curved guide, means for supporting the clamp for pivotal movement about a center corresponding with that from which the curve of said guide is generated, and a fastening mechanism provided with a way to receive said guide.

37. In a device of the class described, the combination of a work support, a fastening mechanism, a clamp constructed to engage and hold the work when positioned and arranged for movement to present it to the fastening mechanism, and means to automatically release the work from said clamp at the end of the fastening operation.

38. In a device of the class described, the combination of a work support, a fastening mechanism, a clamp constructed to engage and hold the work when positioned and arranged for movement to present it to the fastening mechanism, and means for automatically moving the clamped work away from the fastening mechanism at the completion of the fastening operation.

39. In a device of the class described, the combination of a work support, a fastening mechanism, a clamp constructed to engage and hold the work when positioned and arranged for movement to present it to the fastening mechanism, and means for automatically moving the clamped work away from the fastening mechanism and for releasing the work from the clamp at the completion of the fastening operation.

40. In a device of the class described, the combination of a work support, a fastening mechanism, a clamp constructed to engage and hold the work when positioned, pivotal means connecting said clamp with the work support to enable it to carry the work toward and from said mechanism, a yielding device to move the clamp away from said mechanism at the completion of the fastening operation, and means for releasing the work from the clamp during such movement.

41. In a device of the class described, the combination of a work support, a fastening mechanism provided with a guideway, a clamp to engage the guideway and comprising two relatively movable members and a pivoted cam having an extension, an arm

connected with said clamp and provided with a slot, a stud sustained by the work support and entering said slot, yielding means connecting said arm and stud, and an abutment located in the path of said extension, the parts being so arranged that when the clamp escapes from the guideway as the work is being fed to said mechanism the yielding means will cause the cam extension to engage the stud and rotate the cam to release the work.

42. In a device of the class described, the combination with sewing mechanism, of a presser-foot having a guide, a clamp for holding the work having means to cooperate with said guide in directing the work, and means for feeding the clamped work.

43. In a device of the class described, the combination with fastening mechanism, of holding means for the work, and means acting on the work and other means acting on said holding means for feeding the work relatively to said mechanism.

44. In a device of the class described, the combination with fastening mechanism, of a clamp for holding in assembled relation the parts to be united by said mechanism, means acting on the clamp and other means acting on the work for feeding the work, and devices for guiding the clamp relatively to said mechanism at a plurality of points.

45. In a device of the class described, the combination of mechanism for operating upon the work, a clamp for holding the work, devices for guiding the work in a predetermined line, feeding means to act on the work, feeding means to act on the clamp constructed to impart a different rate of movement thereto from that of the first-named feeding means, and means acting automatically to maintain the proper ratio between said feeding movements whereby the work is fed in said predetermined line.

46. In a device of the class described, the combination with fastening mechanism provided with a guide, of a clamp for holding the work having means cooperating with said guide, means acting on the clamp for feeding the work, and a governing device acting automatically to control the speed at which the clamp is moved by said means and thereby to cause the work to be fed in a predetermined line.

47. In a device of the class described, the combination with fastening mechanism provided with a guide, of a clamp for holding the work having guiding means to cooperate with said guide, means for feeding the work at a plurality of points, and a governing device acting automatically to cause the work to be fed in a predetermined line.

48. In a device of the class described, the combination of a mechanism for operating upon work, a guide associated therewith, a

clamp for holding the work having a co-operating guide and a bar, feeding means to act on the work, a feeding means to act on said bar and impart thereto a different speed from that which said feeding means imparts to the work, and a governing device to automatically control the feeding movements of one of said feeding means whereby the work is caused to be fed to said mechanism on a line determined by said co-operating guides.

49. In a device of the class described, the combination of stitch-forming mechanism, a guideway associated therewith, a clamp for holding the work having a flange to enter said guideway and a bar, said flange and bar being formed on curves generated from a common center, feeding means to act on the work, a feed roll to act on said bar and impart thereto a greater speed than said feeding means imparts to the work, and a governing device to automatically control the feeding movements of said roll whereby the work is caused to be fed to the stitch-forming mechanism on a line determined by the shape of said flange.

50. In an apparatus of the class described, the combination of mechanism for operating upon work, a guide associated therewith, a clamp for holding the work having a member to co-operate with said guide and another guide member, feeding means to act on the work, feeding means to act on said other guiding member and impart thereto a different speed than said feeding means imparts to the work, and a device located between said second feeding means and other guiding member, said parts being so arranged that an undue increase in speed of the feeding movements of said second member will force the said other guiding means against said device and lift the second member from its co-operating guiding means.

51. In a device of the class described, the combination with sewing mechanism, of a presser-foot having a guide, a clamp for holding the work having means to co-operate with said guide in directing the work.

52. In a device of the class described, the combination of fastening mechanism, a clamp for holding the work, devices for guiding the work in a predetermined line, feeding means to act on the work, feeding

means to act on the clamp constructed to impart faster movements thereto than those of the first-named feeding means, and means acting automatically to maintain the proper ratio between said feeding movements whereby the work is fed in said predetermined line.

53. In an apparatus of the class described, a clamp for holding the work, devices for guiding the work in a predetermined course, feeding means to act on the work and other feeding means to act on the clamp and constructed and arranged to tend to impart to said work and said clamp different rates of feeding movement and means for maintaining automatically the proper ratio between the feeding movements on the work and clamp whereby the work is caused to be advanced in the predetermined course.

54. In a device of the class described, the combination of a stitch forming mechanism, a guideway associated therewith, a clamp for holding the work having a curved flange to enter said guideway and a curved bar, feeding means to act on the work, a feed roll to act on said bar and impart thereto a greater speed than said feeding means imparts to the work, and a governing device to automatically control the feeding movements of said roll whereby the work is caused to be fed to the stitch-forming mechanism on a line determined by the shape of said flange.

55. In a device of the class described, the combination of stitch-forming mechanism, a guideway associated therewith, a clamp for holding the work having a curved flange to enter said guideway and a curved bar, feeding means to act on the work, a feed roll to act on said bar and impart thereto a greater speed than said feeding means imparts to the work, and pins located between said roll and bar, said parts being so arranged that an undue increase in speed of the feeding movements of said roll will force the bar against one of the pins and lift the bar from the roll.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

BENJAMIN F. MAYO.

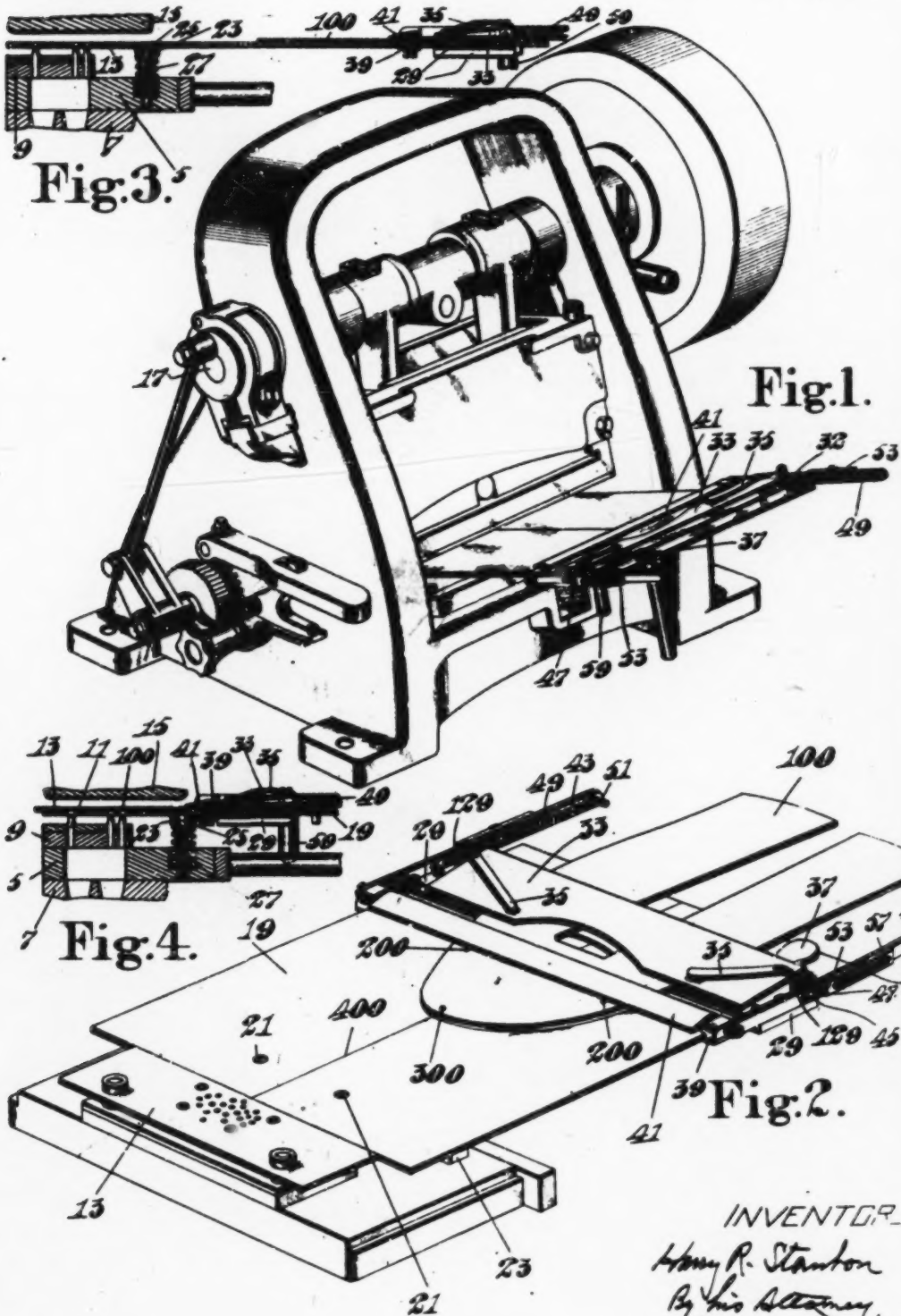
Witnesses:

JENNIE P. ANDERSON,
ALBERT PREVOST.

Part of Defendants' Exhibit K.
(Letters Patent No. 1,430,697 to H. R. Stanbon,
October 3, 1922.)

1,430,697.

Patented Oct. 3, 1922.



UNITED STATES PATENT OFFICE.

HARRY R. STANBON, OF LYNN, MASSACHUSETTS, ASSIGNOR TO UNITED SHOE MACHINERY CORPORATION, OF PATERSON, NEW JERSEY, A CORPORATION OF NEW JERSEY.

VAMP GAUGE FOR PUNCHING MACHINES.

Application filed May 19, 1919. Serial No. 208,048.

To all whom it may concern:

Be it known that I, HARRY R. STANBON, a citizen of the United States, residing at Lynn, in the county of Essex and State of Massachusetts, have invented certain Improvements in Vamp Gauges for Punching Machines, of which the following description, in connection with the accompanying drawings, is a specification, like reference characters on the drawings indicating like parts in the several figures.

This invention relates to a device for facilitating presentation of a piece of work in position to be operated upon and is herein illustrated as embodied in a device designed to facilitate the presentation of a vamp to the operating tool of a punching machine.

In the manufacture of boots and shoes it is customary to ornament certain parts of the uppers by punching designs therein by means of a gang punching machine. Machines of this type find their principal use in punching a row of ornamental holes along that edge of the tip which is attached to the vamp. The proper presentation of tips to receive such ornamentation can be readily secured by providing edge gauges, since the edges of tips are cut on regular curves of large radius and the radius of curvature varies little, if at all, with different tips. When, however, it is desired to use a pattern punch to ornament portions of certain other parts, such for example as the toe portions of vamps, certain difficulties arise, especially since in machines commonly used for this work it is impossible to see that portion of the work which is to be operated upon when it has been placed in position to be punched.

In order to promote brevity the problem of properly presenting a vamp to receive an ornamental punched pattern in its toe portion will be considered. The toe portions of vamps are not cut on regular curves, and their outlines differ according to whether they are rights or lefts or whether they are of one size or another. It frequently happens that in a single factory there may be used several hundred different vamps,—different, that is, in the sense that, if edge

gauges were used, different settings of the edge gauges would be required in order to locate the vamps properly with respect to the punches. The problem is further complicated by the fact that the location of the pattern to be punched is always given as a certain distance from the center of the throat of the vamp so that additional adjustment of the edge gauges would be required according to whether a given vamp had a long or a short toe portion. Again, the toe portion of the vamp is not visible when in position to be punched. For these and other reasons, which will appear in the description of the illustrative machine, it is impractical to make use of edge gauges.

According to the present invention, there is provided improved means for facilitating presentation of a blank to the mechanism for operating upon it. By placing the blank properly in a holder where it is in full view of the operator, providing locating means other than edge gauges and then advancing the holder to the position determined by a stop, the blank may be accurately presented to the operating mechanism.

With such a construction and assuming that the position in which the holder is arrested in its advance toward the operating mechanism is always the same, it is desirable to provide means for locating differently shaped blanks differently in the holder. Accordingly another feature of the invention relates to such means. In the illustrative machine the vamp holder is slidable over a supporting plate toward the punching mechanism. In front of the holder and adjustably spaced from it is a guide having a straight edge which may be used in connection with certain marks on the vamp to locate the vamp in the holder. The vamp having been properly located, the holder with the vamp in it is pushed forward until its movement is arrested by a fixed stop at which time the toe portion of the vamp is properly located with respect to the punching mechanism. By varying the space between the guide and the holder, the location of the vamp in the holder may be varied and con-

sequently the position of presentation of the vamp, which results from moving the holder and vamp forward, until the stop is encountered.

5 These and other features of the invention, including certain details of construction and combinations of parts, will be described as embodied in an illustrative machine and pointed out in the appended claims.

10 Referring now to the accompanying drawings,—

Fig. 1 is a perspective of a machine in which the present invention is embodied;

15 Fig. 2 is a perspective showing the punch-plate holder and its associated parts;

Figs. 3 and 4 are fragmentary sections showing more particularly the vamp-gauge in its vamp-receiving and in its vamp-presenting positions.

20 The illustrative machine, aside from the gauge and its mounting, is or may be, except as will be pointed out, substantially like that shown in the patent to Rigby No. 1,113,910. It comprises a punch-plate holder 5 which

25 rests upon a suitably constructed portion of the frame 7, a punch-plate 9 which is carried by the punch-plate holder, a die illustrated as a series of punches 11 arranged in the pattern shown in Fig. 2, a yieldingly sustained stripper plate 13 provided with

30 holes through which the punches may be forced, and a reciprocable platen or punch block illustrated as a plunger 15. The paper backing strip which extends over the face

35 of the punch block has been omitted in Figs. 1, 3 and 4 to promote clearness in the showing. The punch block is reciprocated from a shaft 17 through a suitable clutch which causes the shaft to make one revolution and

40 then come to rest in the position shown with the punch block raised as shown in Figs. 3 and 4 to permit withdrawal of the punched blank and presentation of a succeeding one. The punches in the Rigby machine are

45 shown arranged in a row for punching tips while those in the present machine are arranged in a pattern for punching the toe portion of a vamp. Otherwise the present machine, as thus far described, is or may be

50 substantially like that of Rigby and will not be described in detail. It will be understood that if a portion of a blank is placed on the stripper plate 13 over the punches and the clutch thrown in, the blank will be punched.

55 The proper presentation to such a machine of plain tips which are to be perforated along the edge which is to be attached to the vamp, may readily be accomplished by means of edge gauges such as are shown

60 in the Rigby machine, since this edge is cut on a circular curve of large radius and the radius of curvature varies little, if at all, with different tips. When, however, the machine is to be used for punching a pattern

in certain other parts, difficulties are en- 65 countered. In the case of vamps for example which are to be ornamented by patterns punched in their toe portions, the use of edge gauges is impracticable. The toe 70 portions of vamps are not cut on regular curves and their outlines differ according to whether they are rights or lefts or whether they are of one size or another. It frequently happens that in a single factory 75 there are several hundred different shapes of vamps, different in the sense that, if edge gauges were used, several hundred different settings of the gauges would be required to locate the punch patterns properly in their toe portions. It should be noted too, that 80 in a machine of the type shown it is very difficult, if not impossible, to see such edge gauges when they are in position beneath the punch block; and obviously it is impractical to withdraw the punch-plate holder 85 between operations and reset the gauges. A further objection to the use of edge gauges arises from the fact that the location of the pattern to be punched is always given as a certain distance from the throat of the vamp 90 so that additional adjustments would be required, if edge gauges were used, according to whether a vamp had a long or a short toe portion. For many reasons, then, of which the above are typical, the proper presenta- 95 tion of vamps to a pattern punching machine is attended with difficulty.

In the illustrative machine the vamp is placed in a holder and then the holder, with the vamp in it, is advanced to the punching mechanism until arrested by a fixed stop. 100 The position which the toe portion of the vamp then occupies with respect to the punching mechanism will depend upon the position in which the vamp was initially 105 placed in the holder; and in the present machine means are provided for securing in each case the proper initial position for the particular vamp which is to be operated upon. 110

Abutting at its forward end against the stripper plate 13 and yieldingly held at the same level as the stripper plate is a support 19 in the form of a plate of sheet metal. This supporting plate might be integral 115 with and merely an extension of the stripper plate since the two plates always preserve the same relation and are moved up and down in unison. In the illustrative machine the supporting plate 19 is fastened by screws 120 21 to a bar 23 which is fast to the upper ends of a plurality of pins 25 which are vertically slidable in sockets in the punch-plate holder. Springs 27 encircle the pins and are of sufficient strength to sustain the parts 125 in the positions shown, it being understood that when the punch block 15 is moved downwardly the stripper plate 13 and the support-

ing plate 19 are forced downwardly in unison and that when the punch block rises the plates rise into the positions shown.

Slidably mounted on the support 19 is a 6 vamp holder comprising a carrier 29 and a clamping member in the form of a plate 33 which is pivoted at opposite ends to lugs 129 on the carrier, one of the pivots being shown at 32 in Fig. 1. Leaf springs 35, fastened 10 at their rear ends to the lugs 129, urge the forward end of the clamping plate 33 downwardly so as to hold a vamp in the manner shown in Fig. 2, a finger-piece 37, fast to the plate furnishing means whereby the plate 15 may be tilted about its pivots to permit the vamp to be placed in and removed from the holder. Mounted on the supporting plate 19 in advance of the vamp holder is a guiding device for locating the vamp in the 20 holder, said device comprising a guide carrier 39 and a guide, herein shown as a straight edge 41. The guide carrier 39 is connected with the holder carrier 29 by bars 43 provided with slots 45 through which extend loosely the stems of screws 47 which are threaded into the lugs 129 of the holder carrier. Springs 49, connected at their rear 25 ends to pins 51 on the bars 43 and at their forward ends to the lugs 129, normally maintain the guide spaced from the vamp holder, as shown in Figs. 2 and 3, the extent of the separation being determined by the position of stops 53 which are adjustably mounted on the bars 43. These stops are 35 slotted at 55 to receive the stems of the screws 57 which hold them in adjusted position on the bars 43. This variable separation of the guide and the vamp holder provides for an initial adjustment to suit different 40 styles of vamps and thus enables the perforations to be located at different distances from the throats.

Assuming now that a vamp is provided with suitable locating marks such as 200, 45 which ordinarily vary in position with respect to the throat in accordance with the sizes, and that, with the illustrated adjusted position of the stops 53, the vamp is placed in the holder with the forward edge of the 50 guide 41 registering with the marks 200, the longitudinal position of the vamp in the holder will then be as shown. If, however, the stops 53 are adjusted backwardly, the vamp will protrude farther forward 55 through the holder than before; and, if the stops are adjusted forwardly, the vamp will not protrude so far forward through the holder as before. There is thus provided means for facilitating the accurate location 60 of the vamp in different positions longitudinally in the holder, so that when the holder is pushed forwardly toward the punching mechanism until it is arrested by a fixed stop, the proper locality in the toe portion

of the vamp may be brought into position 65 above the pattern punch. In order to center the vamp transversely, the support 19 is scored with a line 400, and this line is caused by the operator to register with a suitable center mark 300 on the vamp. In 70 order to facilitate adjustment of the stops 53, these stops are provided with pointers which co-operate with a suitably graduated scale on the bars 43; and in order to facilitate grasping the vamp holder to push it 75 forward, two pins 59 project from its under side.

The operation of the device is as follows: The operator is furnished with vamps marked in three places as indicated and is 80 also furnished with data showing how far from the throats of the vamps the center of the pattern punching is to be located. With this data he first sets the stops 53. He next inserts a vamp in the holder with 85 the marks 200 registering with the forward edge of the guide 41 and the mark 300 registering with the line 400. And then, grasping the vamp holder with his thumbs and forefingers, he pushes the holder toward the 90 punching mechanism. Both the guide and the holder move forward until the guide carrier 39 contacts with and is arrested by the bar 23, which serves as a stop. Thereafter the holder moves forward until its 95 carrier 29 is arrested by contact with the guide carrier 39, at which time the toe portion of the vamp is properly located with respect to the punching mechanism, and the punch block 15 is caused to descend. Figs. 100 2 and 3 show the vamp properly located in the vamp holder ready to be advanced. Fig. 4 shows the vamp in position to be punched, the springs 49 being extended, the guide carrier 39 in contact with the 105 bar 23 and the carrier 29 in contact with the carrier 39.

Although the invention has been set forth as embodied in a particular machine, it should be understood that the invention is 110 not limited in the scope of its application to the particular machine which has been shown and described.

Having thus described my invention, what I claim as new and desire to secure by 115 Letters Patent of the United States is:

1. In a vamp perforating machine, in combination, a punch block, a perforating die for ornamenting a vamp, and a vamp locating member movable to carry a vamp 120 from a locating position free and clear of the punch block to a perforating position.

2. In a vamp perforating machine, in combination, a punch block mounted to reciprocate, a stationary gang punch for or- 125 namenting a vamp, and a vamp locating member mounted to carry a vamp from a locating position free and clear of the recip-

rotating punch block to a punching position between the punch block and the punch.

3. A machine of the class described, having in combination, mechanism for operating upon a blank and means for facilitating the presentation of a blank thereto, said means comprising a holder for the blank, means for properly locating the blank in the holder, means for moving said holder toward the operating mechanism, and means for arresting the movement of the holder when the blank has reached the position at which it is to be acted upon by an operating mechanism.

4. A machine of the class described, having in combination, mechanism for operating upon a blank and means for facilitating the presentation of a blank thereto, said means comprising a holder for the blank, a guide for properly locating the blank in the holder, said holder being movable toward the operating mechanism, and means for arresting the movement of the holder when it has reached a predetermined position.

5. A machine of the class described, having in combination, mechanism for operating upon a blank and means for facilitating the presentation of a blank thereto, said means comprising a holder for the blank, means for indicating the proper location of the blank in the holder, said indicating means and holder being movable toward the operating mechanism, and means for arresting the movement of the holder.

6. A machine of the class described, having in combination, mechanism for operating upon a blank and means for facilitating the presentation of a blank thereto, said means comprising a holder for the blank, means for properly locating the blank in the holder, said locating means and holder being movable toward the operating mechanism, and means for arresting first the movement of the locating means and thereafter the movement of the holder.

7. A machine of the class described, having in combination, mechanism for operating upon a blank and means for facilitating the presentation of a blank thereto, said means comprising a holder for the blank, a guide for properly locating the blank in the holder in accordance with a characteristic of said blank, said guide and holder being movable toward the operating mechanism, and means for arresting the movement of the holder.

8. A machine of the class described, having in combination, mechanism for operating upon a blank and means for facilitating the presentation of a blank thereto, said means comprising a holder for the blank, a guide for properly locating the blank in the holder, said guide and holder being movable toward the operating mechanism,

and means for arresting first the movement of the guide and thereafter the movement of the holder.

9. A machine of the class described, having in combination, mechanism for operating upon a blank and means for facilitating the presentation of a blank thereto, said means comprising a support, a blank holding member, a member for locating the blank in the holding member, said members being movable in unison along the support toward the operating mechanism as well as with respect to each other, and means for arresting the movement first of one and then of the other member.

10. A machine of the class described, having in combination, mechanism for operating upon a blank, and means for facilitating presentation of a blank thereto, said means comprising a holder movable toward said mechanism, means for arresting the movement of the holder at a predetermined point, and means whereby the location of the blank in the holder may be varied to vary the locality of the blank upon which the mechanism will operate.

11. A machine of the class described, having in combination, mechanism for operating upon a blank and means for facilitating the presentation of a blank thereto, said means comprising a support, a holder for the blank slidable along the support, means for locating the blank in the holder, said locating means being in front of the holder and being also slidable along the support, yielding means for normally maintaining the holder spaced from the locating means and means for arresting the locating means when it has been advanced a predetermined distance along the support, the yielding means then permitting further advance of the holder.

12. A machine of the class described, having in combination, mechanism for operating upon a blank and means for facilitating the presentation of a blank thereto, said means comprising a support, a holder for the blank slidable along the support, a guide for locating the blank in the holder, said guide being in front of the holder and being also slidable along the support, yielding means for normally maintaining the holder spaced from the guide, and means for arresting the guide when it has been advanced a predetermined distance along the support, the yielding means then permitting further advance of the holder.

13. A machine of the class described, having in combination, means for operating upon a blank and means for facilitating presentation of a blank thereto, said means comprising a blank holder, means for locating the blank in the holder, a support along which the locating means and holder may be advanced toward the operating mechanism,

means for arresting the advance of the locating means while permitting further advance of the holder, and means whereby the extent of the advance of the holder after the arresting of the locating means may be varied.

14. A machine of the class described, having in combination, means for operating upon a blank and means for facilitating presentation of a blank thereto, said means comprising a blank holder, a guide for locating the blank in the holder, a support along which the guide and holder may be advanced toward the operating mechanism, means for arresting the advance of the guide while permitting further advance of the holder, and means whereby the extent of the advance of the holder after the arresting of the guide may be varied.

15. A machine of the class described, having in combination, punching mechanism and means for facilitating presentation thereto of a vamp comprising a vamp support marked to facilitate the location of the vamp widthwise of the support, a guide to facilitate the location of the vamp lengthwise of the support, a carrier for the guide slidably mounted on the support, a vamp holder slidably mounted on the support and spaced from the guide carrier, a yielding connection between the carrier and the holder, a stop located in the path of the guide carrier, and means whereby the space between the carrier and the holder may be adjusted to vary the distance which the vamp will be moved after the guide carrier has engaged the stop.

16. A device for facilitating presentation of a blank to operating mechanism so constructed that the portion of the blank to be operated upon is not visible to the operator when the blank is in position to be operated upon, comprising a blank holder movable from a position in which the blank held therein is in full view of the operator toward the operating mechanism, and means for accurately locating the blank in the holder.

17. A machine for operating upon sheet stock having, in combination, a die, a platen, a holder for pieces of sheet stock of different character to be operated upon, said holder being movable to present the stock between the die and the platen, means for arresting the movement of the holder when a piece of sheet stock has reached a position dependent upon a characteristic of the stock, and means to cause relative motion of the die and the platen to operate upon the piece of sheet stock.

18. A perforating machine having, in combination, a punch, a punch block, means to cause relative perforating movement of the punch and punch block, a holder for engaging opposite faces of a blank to be perfo-

rated and movable into perforating relation to the punch and punch block, and means for arresting the movement of the holder when the blank has reached a position varying with a characteristic of said blank.

19. A perforating machine having, in combination, a punch, a punch block, a holder for a blank to be perforated movable into perforating relation to the punch and punch block, means for arresting the movement of the holder when the blank has reached a position dependent upon a characteristic of said blank, and means for reciprocating the punch block to perforate the blank.

20. A perforating machine having, in combination, a punch, a punch block, a holder for a blank to be perforated movable towards and into operative relation to the punch and punch block, a stop for arresting the movement of the holder at a predetermined point, means whereby the location of the blank in the holder may be varied to vary the locality of the perforating upon the blank, and means for causing relative movement of the punch and punch block to perforate the blank.

21. A machine for perforating blanks having perforating means comprising a gang punch and a punch block, a holder for engaging opposite faces of a blank to be perforated, said perforating means and holder being arranged for relative movement in a direction to present blanks in operative relation to the punch and punch block, and means for arresting said relative movement when the blank is in operative relation to the perforating means.

22. A machine for perforating blanks having, in combination, perforating means, a holder for a blank to be perforated, said perforating means and holder being arranged for relative movement in a direction to present blanks in operative relation to the perforating means, means for gaging the position of a blank in the holder in accordance with a characteristic of said blank, and a stop for arresting said relative movement when the blank is in operative relation to the perforating means.

23. A machine for ornamentally perforating vamps in a desired locality, having, in combination, a punch block, a perforating die for ornamenting a vamp, and mechanism for presenting the vamp in a predetermined position between the punch block and the die, said mechanism comprising a reciprocatory member constructed and arranged to locate the vamp initially while free and clear of the die and thereafter to carry the vamp to a position in which the die is opposite the desired locality of the vamp.

24. A machine for ornamentally perforating vamps in a desired locality having, in combination, a punch block, a perforating

die for ornamenting a vamp, and mechanism for presenting the vamp in a predetermined position between the punch block and the die, said mechanism comprising a carrier 5 on which the vamp is initially positioned while free and clear of the die and an adjustable guide member for locating the vamp

on the carrier in accordance with size and style, said carrier being thereafter movable to carry the vamp to a perforating position. 10

In testimony whereof I have signed my name to this specification.

HARRY R. STANBON.

Part of Defendants' Exhibit K.
(Letters Patent No. 1,313,956 to R. Schwalbach,
August 26, 1919.)

698

R. SCHWALBACH.
SHOE TIP PERFORATOR.
APPLICATION FILED MAY 21, 1918.

1,313,956.

Patented Aug. 26, 1919.
5 SHEETS—SHEET 1.

Fig. 1.

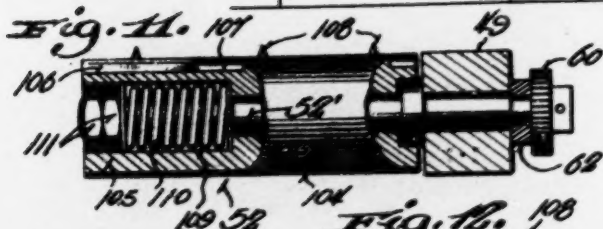
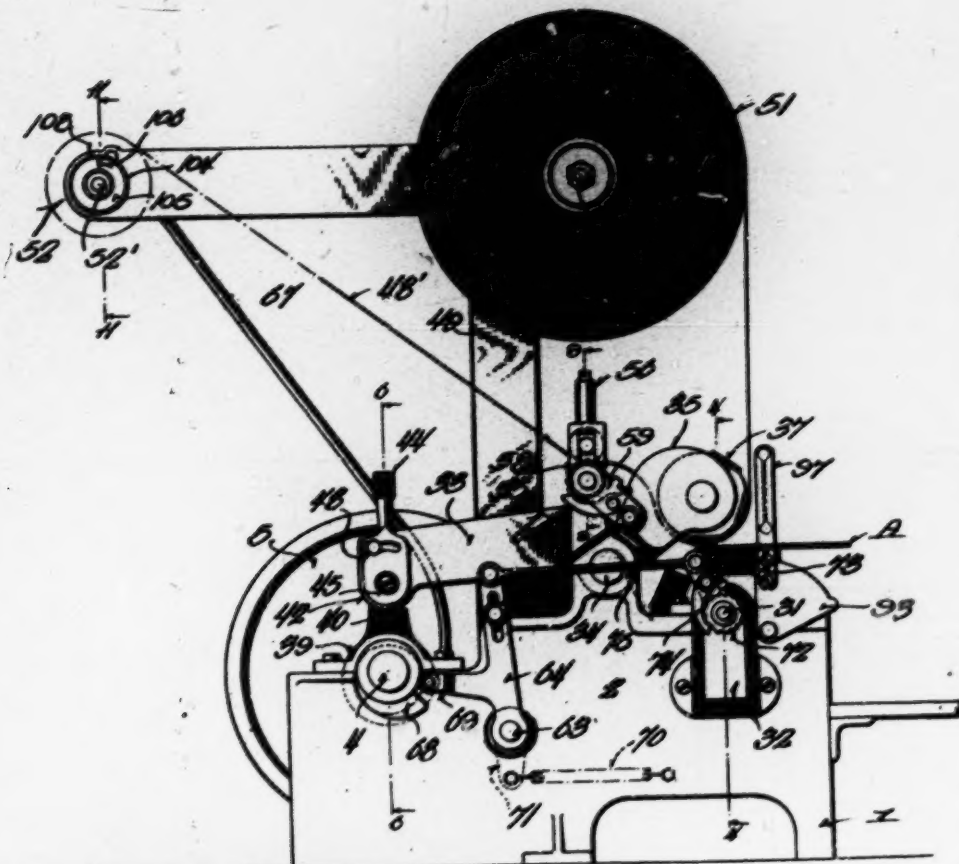
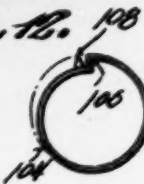


Fig. 12.



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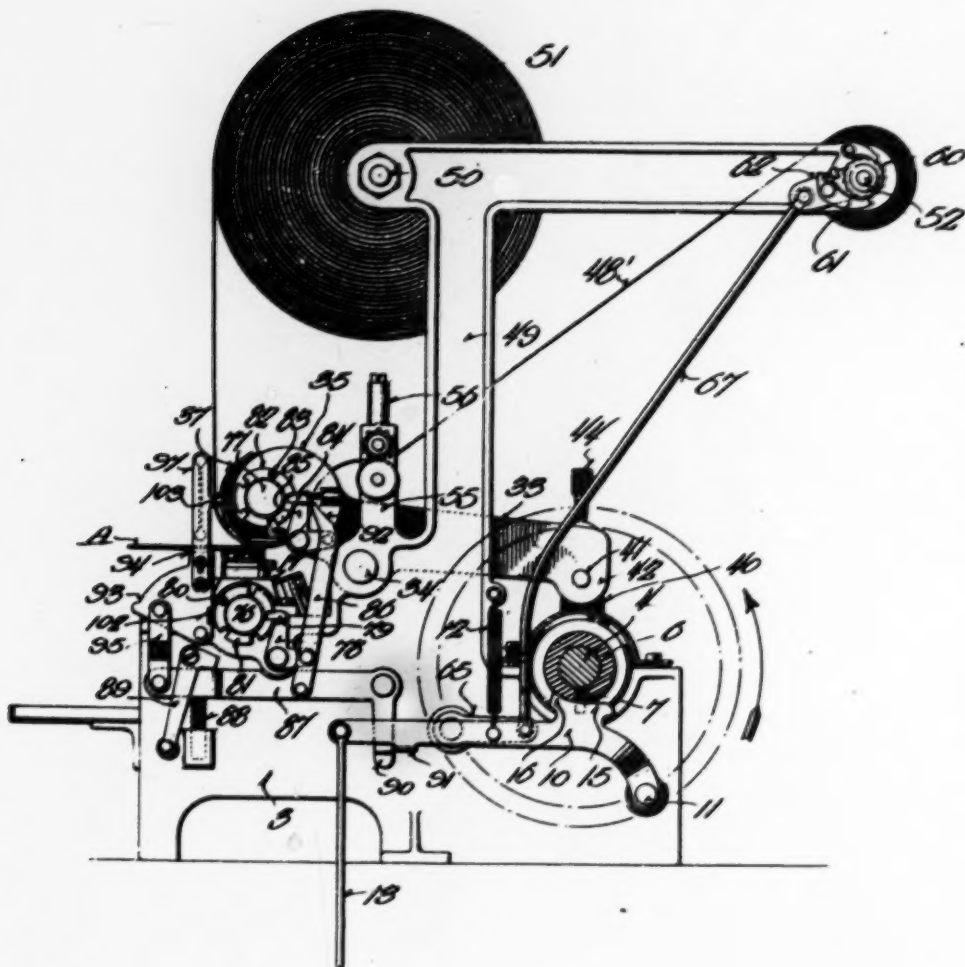
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5 SHEETS—SHEET 2.

Fig. 2.



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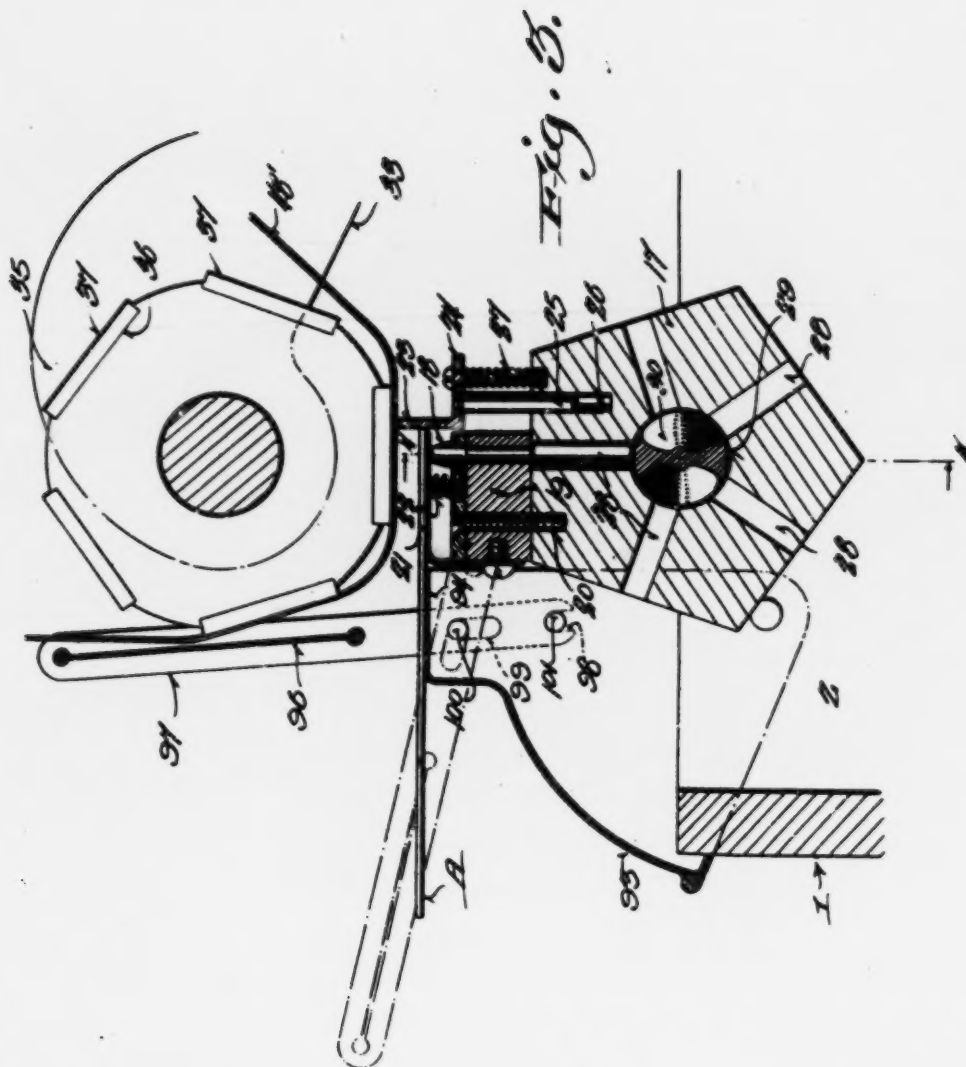
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1,313,956.

Patented Aug. 28, 1919.
3 SHEETS—SHEET 3.



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APPLICATION FILED MAY 21, 1919.

1,313,956.

Patented Aug. 26, 1919.
3 SHEETS—SHEET 4.

Fig. 4.

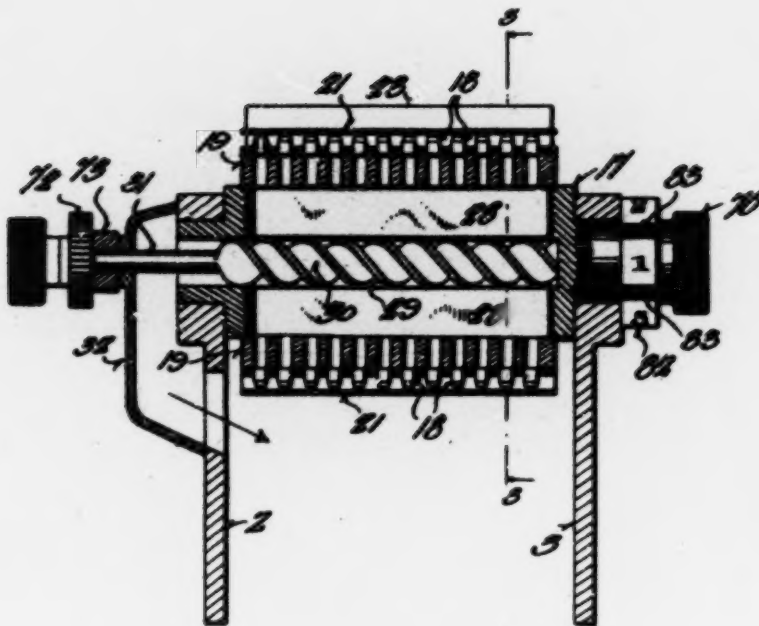
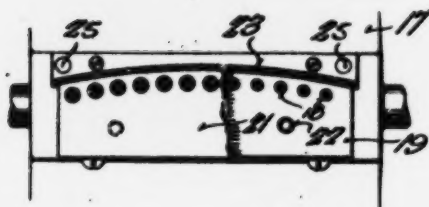


Fig. 5.



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1,313,956.

Patented Aug. 26, 1919

5 SHEETS—SHEET 5.

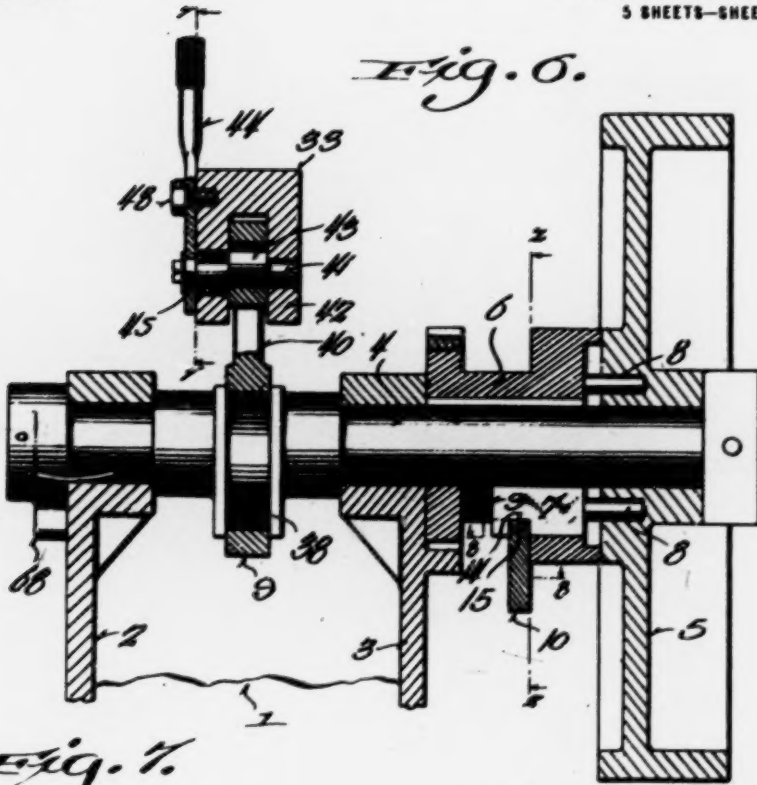


Fig. 7.

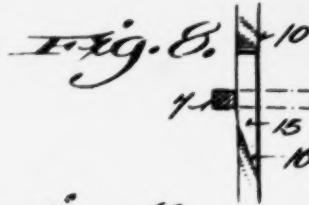
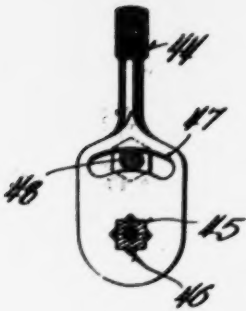


Fig. 10.

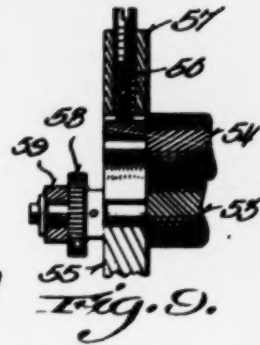
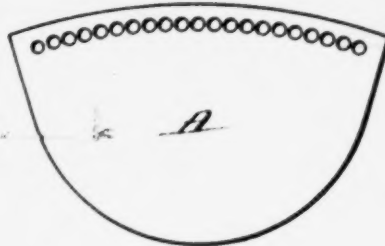


Fig. 9.

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ATTORNEY

UNITED STATES PATENT OFFICE. 707

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ROBERT W. BLAISDELL, OF MILWAUKEE, WISCONSIN.

SHOE-TIP PERFORATOR.

1,313,956.

Specification of Letters Patent.

Patented Aug. 26, 1919.

Application filed May 21, 1918. Serial No. 235,872.

To all whom it may concern:

Be it known that I, ROBERT SCHWALBACH, a citizen of the United States, and resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Shoe-Tip Perforators; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates broadly to improvements in machines for perforating sheets of material, and more particularly to that class of machines which are designed for perforating shoe tips and similar pieces of leather.

Heretofore in machines of this general class it has been necessary to more or less disassemble the same when it is desired to make a change in the pattern of the dies used for cutting or perforating the material. This required a considerable length of time and obviously the machine was entirely inoperative during the change. It is therefore the principal object of the present invention to provide in connection with a machine of improved design a plurality of patterns of dies, any one of which can be quickly and easily shifted into operative position so that the machine is only momentarily inactive.

A further object is to provide such a machine with an intermittently actuated perforating mechanism in combination with the plurality of die patterns. In other words after each actuation of the machine to perforate the shoe tip or the like, the operating mechanism therefor is automatically thrown out of action and remains so until manually caused to again function. Such an arrangement permits the association of a safety device which will positively prevent the manual operation referred to from being performed if none of the several perforating dies are properly set.

An additional object of the invention is to provide means for intermittently actuating a backing sheet, such intermittent movement of the same being caused by the operation of the perforating mechanism.

Another object is to provide a safety guard adjacent the inlet of the passage-way to the perforating dies so that an operator cannot insert his fingers into engagement with said dies.

And a still further important object is to

provide in connection with each of the several perforating dies a positioning member whereby the shoe tips or the like will be accurately positioned with respect to the dies which are to operate thereupon.

With the foregoing and other minor objects in view the invention resides in the novel features of construction, combination and arrangement of parts which will be hereinafter more particularly described and claimed and shown in the drawings in which:

Figure 1 represents a left hand elevational view of a machine constructed in accordance with my invention.

Fig. 2 is a similar view looking toward the right hand side of the machine, certain parts, however, being in section as indicated by the line 2—2 of Fig. 6.

Fig. 3 is an enlarged sectional view through the perforating mechanism of the machine on the line 3—3 of Fig. 4.

Fig. 4 is a longitudinal sectional view taken substantially on the plane of the line 4—4 of Fig. 1 or on the same line of Fig. 3.

Fig. 5 is a detail plan view, partly in section, showing one of the patterns of perforating dies and the association of a positioning member therewith.

Fig. 6 is a sectional view taken substantially on the plane of the line 6—6 of Fig. 1.

Fig. 7 is a detail section on the plane of the line 7—7 of Fig. 6.

Fig. 8 is a similar view on the line 8—8 of Fig. 6.

Fig. 9 is an enlarged detail section on the line 9—9 of Fig. 1, and

Fig. 10 is a plan view of a shoe tip after the same has been perforated by my machine.

Fig. 11 is a longitudinally sectional view taken on the plane of the line 11—11 of Fig. 1.

Fig. 12 is an end view of a portion of the roller 52 and shown particularly in the preceding figure.

Referring more particularly to the several figures of the drawings, but more specially to Figs. 1 and 2, it will be seen that the numeral 1 denotes a supporting base which is substantially rectangular in plan view and has left and right hand upright side walls 2 and 3 respectively upon which the majority of the operating mechanism is mounted. Referring to the several parts of

such mechanism in detail, it will be noted that a main shaft 4 has its opposite ends journaled in the walls 2 and 3 adjacent the rear end of the base, and that one end of this shaft projects beyond the wall 3 and carries a continuously rotating pulley 5 and a clutch mechanism for intermittently connecting the latter thereto.

This clutch device comprises a sleeve 6 splined to the shaft 4 and having a longitudinal key-way cut therein for the reception of a sliding clutch member 7. This clutch member is urged outwardly and toward clutch pins 8 carried by the pulley 5 by means of an expansile spring 9. It is obvious that as long as the clutch members 7 and 8 cooperate that the shaft and pulley will rotate together.

It is desirable, however, in machines of this character to automatically release the clutch at predetermined intervals, as for instance after each complete revolution of the shaft. For performing this operation I provide a clutch operating lever 10 pivoted as at 11 to the wall 3 below the shaft 4, said lever being urged toward the shaft by means of a contracting coiled spring 12. A rod 13 is pivoted to the forward end of the lever 10 and is adapted to extend downwardly to a foot pedal or the like (not shown) whereby the said lever may be forced downwardly against the tension of said spring 12. Formed on the clutch lever 10 in a position to engage in a notch 14 cut in the outer edge of the sliding clutch member 7, is a clutch releasing bar 15, the front end of which is beveled as at 16 so as to engage the notch 14 when the clutch member 7 is in its outermost position and locked with one of the clutch pins 8, thus gradually forcing the former inwardly against the tension of the spring 9 until the clutch is inoperative. When the clutch operating lever 10 is moved downwardly the releasing bar 15 will be disengaged with the notch 14 and the sliding clutch member 7 will spring outwardly into a position to be engaged by one of the clutch pins 8.

Journaled in the walls 2 and 3 of the supporting base at the front end thereof and parallel to the shaft 4 is a revoluble perforating die carrying member 17 which is in the form of a poly-sided roller, each flat face thereof having a set of perforating dies and associated parts, each of the sets of dies being of a different pattern.

Referring to Fig. 3, the cutting dies of each set are indicated by the numeral 18 and are carried by a block 19 which in turn is fixed by screws or the like 20 to the member 17. Over each set of dies is disposed a flexible guide plate 21 which has a laterally extending attaching portion whereby it is secured to the block 19; it also has a plu-

rality of openings through which the dies 18 project during the actual perforation of a shoe tip or other sheet of material A. The guide plate 21 of the set of dies which is in operative position, is disposed substantially horizontally and is held thusly by an expansile spring 22, said spring being between the plate and the block 19.

Disposed at the inner edge of each guide plate 21 and thus spaced inwardly of each seat of perforating dies 18 is an arcuate positioning flange 23, the same having a laterally extending portion 24 to which is secured a number of guide pins 25, the latter being slidable in sockets 26 drilled in the member 17. The positioning flanges 23 are normally forced outwardly by expansile coiled springs 27 which are held between the laterally extending portions 24 and the adjacent face of the die carrying member 17. It will thus be seen that each of the positioning flanges 23 cooperates with the adjacent guide plate 21, the latter forming a seat for the inner portion of the shoe tip A while the latter provides a stop to limit inward movement of the same.

All of the dies 18 forming the several sets are tubular as indicated in the last mentioned figure and the inner end of each communicates with a radial passage-way 28 in the member 17, the several radial passage-ways in turn opening into a preferably cylindrical longitudinal passage-way 29. The last mentioned passage-way is open at one end for the insertion of a screw conveyor 30, the shaft 31 of which projects through the wall 2 of the supporting base and is connected with suitable operating mechanism to be hereinafter more particularly described. As a result of this construction the punchings drop into the longitudinal passage-way 29 and are conveyed externally of the die carrying member 17 and directed through a pocket 32 secured to the wall 2 and thence into the base 1.

A main operating lever 33 is fulcrumed intermediate its ends on laterally extending trunnions 34 which are journaled in the walls 2 and 3 of the base midway the shaft 4 and die carrying member 17. The forward end of the lever 33 is bifurcated to form a pair of ears 35 between which a die plate carrying member is rotatably mounted, said member being in the nature of a roller having its periphery recessed at a plurality of spaced points as at 36. In each of the recesses 36 is secured a die engaging plate 37, one of the plates being adapted to cooperate with each set of dies 18. In other words the plates 37, which are of some soft metal such as copper or brass, are equal in number to the sets of dies.

When in proper position, the plate 37 which is to cooperate with the uppermost set of dies is positioned horizontally so that when

it is moved toward the latter by the rocking of the lever 33, the axis of the dies will be at right angles to the plane of the engaging face of the plate. And when this movement takes place the adjacent positioning flange 23 will be first engaged and forced inwardly and then when the guide plate 21 is reached it will be similarly moved against the tension of the spring 22 so as to force the dies 18 through the opening therein and through the shoe tip A to thus perforate the latter. On the outward movement of the lever 33 the positioning flange and the guide plate will return to their normal extended positions and the prepared shoe tip is removed to make way for a second unperforated tip.

Taking up now the means for rocking the lever 33 it will be observed that the portion of the shaft 4 between the walls 2 and 3 is provided with an eccentric 38, an eccentric strap 39 being disposed therearound and connected with the rear end of the lever 33 by an eccentric arm 40. As the shaft rotates the lever 33 will be rocked to intermittently move the plate carrying member and the plates 37 carried thereby toward the dies.

Means is also provided in connection with the association of the eccentric with the lever 33 for varying the pressure with which the horizontally disposed plate 37 engages this cooperating set of dies. This includes a pin 41, the opposite ends of which are journaled in the flanges 42 of the bifurcated rear end of the lever 33, having an eccentric cam 43 formed intermediate its ends and positioned between said flanges 42. The upper end of the eccentric arm 40 has a bearing opening to receive the eccentric cam 43; as the pin 40 is rotated the rear end of the lever 33 will be raised or lowered with respect to the arm 40 with a consequent reverse movement at the front end of said lever.

The pin 41 is rocked by a crank arm 44 with which it is adjustably connected. From Figs. 6 and 7 it will be seen that one end of the pin 41 is squared as at 45 for engagement with a star opening 46 in the crank arm 44. The intermediate portion of the crank arm is provided with an arcuate slot 47 through which a bolt 48 extends into the lever 33, the head of said bolt retaining both the pin 41 and the crank arm 44 in position. By shifting the crank arm 44 on the bolt 48, a considerable rocking of the pin 41 is permitted, but if an additional amount of pressure is to be exerted by the forward end of the lever 33, the crank arm 44 is entirely removed and readjusted on the squared end of said pin.

In perforating leather or similar material it is customary to provide a backing sheet 48' of heavy paper or light flexible card-board

between the material to be perforated and the die plate 37, this being desirable to procure sharply cut perforations. Inasmuch as the perforating mechanism of the present machine is only intermittently actuated and may be out of operation for considerable period of time, I preferably feed the backing sheet 48' over the die plate intermittently, such movement being controlled by the perforating mechanism. In carrying out this feature of the invention, the side walls 2 and 3 are each provided with an upwardly extending L bracket 49 at the intersection of the arms of each of which is journaled one end of the shaft 50 of a backing sheet roll 51; the free ends of the horizontal arms of said brackets journally carry a roller 52 on which the backing sheet is wound after passing between the dies and die engaging plates and a feeding mechanism.

This feeding mechanism comprises a pair of horizontally disposed serrated or roughened rollers 53 and 54, the opposite ends of which are journaled in bearing standards 55 extending upwardly from the walls 2 and 3. The rollers are superimposed and the upper one has a floating bearing and is urged toward the lower by springs 56 which are mounted in spring housings 57 formed on the upper ends of the standards 55. The shaft of the lower roller 53 has one end extended beyond its adjacent standard 55 to receive a ratchet wheel 58, which is secured thereto, and a pawl carrying lever 59 freely rotatable thereon.

In a similar manner one end of the shaft of the roller 52 is extended and has a ratchet 60 fixed thereon with the teeth of which a pawl 61 carried by a lever 62 is adapted to engage.

The rollers 52, 53 and 54 are designed to be simultaneously revolved, the latter pair for the purpose of feeding the backing sheet from the backing sheet roll 51, and the former to roll up the portion of the sheet thus fed. This is carried out by a rock shaft 63, journaled in the base 1, and having crank levers 64 and 65 fixed on its opposite ends, a connecting rod 66 extending from the crank lever 64 to the lever 59, and a second connecting rod 67 pivoted to the crank lever 65 and lever 62. The rock shaft 63 is actuated to move the lever 64 forwardly and the lever 65 upwardly by the engagement of a cam 68 on the shaft 4 with one end of the cam arm 69 which extends from the first mentioned lever 64. Such forward and upward movement of the respective levers effects the rotation of the levers 59 and 62 respectively in the proper directions to cause the pawls carried thereby to engage and rotate the ratchets. After the cam 68 has moved out of engagement with the cam arm 69 by the continued rotation of the shaft 4,

a contractile spring 70 having one end fixed to the base 1 and the other to a crank 71 on the rock shaft returns the levers 64 and 65 to their normal positions.

As hereinbefore mentioned the conveyer 30 is designed to be rotated to move the punchings longitudinally of the die carrying member 17, and this is effected simultaneously with the rotation of the rollers 52, 53 and 54 and by the same type of mechanism. That is to say a ratchet wheel 72 is fixed to the outer end 81 of the conveyer on which is pivoted a pawl carrying lever 73, the pawl 74 which is fulcrumed thereon being designed to cooperate with the ratchet teeth of the wheel 72. A connecting rod 75 extends from the lever 73 to the upper end of the crank lever 64.

When it is necessary to perforate shoe tips and the like with a different design or pattern of openings from those which had been previously operated upon, the die carrying member 17 is turned to dispose a different set of dies uppermost, such movement being accomplished by grasping and rotating a knob 76 on one end thereof. The plate carrying member on which the die engaging plates 37 are secured is turned in a like manner by a knob 77. First, however, it is necessary to release the locking means which normally holds both of the carrying members in stationary position. The retaining means for the member 17 consists of a bell crank 78 pivoted to the wall 3 of the supporting base 1, on one arm of which is a laterally projecting detent finger 79 for engagement in any one of a series of spaced notches 80, formed in flange 81 on the end of said carrying member 17. Each of the notches 80 correspond to one of the sets of dies and when the detent finger 79 is disposed in one of said notches, a set of dies will be properly positioned to be engaged by its corresponding plate 37.

One end of the plate carrying member is also provided with an annular flange 82 having a plurality of spaced notches 83 in its periphery with which a laterally extending detent finger 84 formed on one arm of a bell crank 85 is adapted to cooperate. These notches 83 are equal in number to the plates 37 and when the detent finger 84 is engaged in any one of the same, one of the plates will be in a horizontal operative position and ready for engagement with its corresponding set of dies.

The arms of the bell cranks 78 and 85 remote from the arms on which said detent fingers are formed are pivoted to the opposite ends and portions of a link 86, the lower end of which is pivoted intermediate the long arm of a bell crank lever 87, said lever being fulcrumed on the wall 3 of the base 1. Said long arm of the lever 87 is extended for-

wardly and is normally urged upwardly by an expansile spring 88. Above the bell crank lever 87 and adjacent the outer end of the long arm thereof is pivoted a releasing crank 89, one end of which is adapted to engage said arm when rotated in one direction whereby to rock said lever 87 downwardly to move the link 86 in the same direction; such movement of the link obviously releases the detent fingers 79 and 84 from their notches 80 and 83 respectively, thus permitting the carrying members for the dies and their plates to be freely rotated.

After adjusting said carrying members to their new positions, the crank 89 is moved into inoperative position and the spring 88 exerts its tension to rock the bell crank lever 87, and through the link 86 the bell cranks 78 and 85 are shifted to their locking position. Should one of the detent fingers be not seated in any one of its notches, the bell crank lever 87 will not return to its original or normal position. Therefore since it will be detrimental to the machine to allow the same to operate when either of the carrying members is improperly positioned, the short depending arm of the bell crank lever 87 is provided with a stop finger 90 for cooperation with a similar finger 91 on the clutch operating lever 10.

Thus when the detent finger 79 engages only the periphery of the flange 81, the stop finger 90 will be disposed below the stop finger 91 to thus prevent the downward movement of the clutch operating lever 10, which movement, it will be remembered, causes the release of the sliding member 7 of the clutch to permit its cooperation with the clutch pins 8. The stop fingers 90 and 91 are similarly positioned when the detent finger 84 is not seated in any of its notches, a finger 92 on the upper end of the link 86 being engaged with the laterally extending portion of said finger 84 when the first mentioned parts are so arranged; and also when the releasing crank 89 has been operated to throw the bell cranks 78 and 85 to unlocked position.

Pivoted to the walls 2 and 3 of the base 1 over the upper edge of the front wall thereof so as to cover the space between the latter wall and the die carrying member 17 is a guard hood 93, the same having a laterally extending flange 94 which, when the hood is in operative position, is horizontal and in substantially the same plane as the guide plate 21 on the uppermost set of dies. (See Fig. 3). The flange and the adjacent guard plate form a support of considerable width for the shoe tip or the like A.

Inasmuch as the inner edge of said flange 94 is in close proximity to the outer edge of its cooperating guide plate, it is necessary to move the guard hood 93 outwardly prior to

the rotation of the die carrying member for the selection of a new set of dies. This is done simultaneously with the unlocking of the die and plate carrying members by pivoting one end of a link 95 to the hood at a point spaced from its pivotal connection with the wall 3, and similarly connecting the other end of said link to the forward free end of the long arm of the lever 87. The guard hood is thereby swung into and out of operative position by the movement of the releasing crank 89, but it will be noted that it is always in operative position when the perforating mechanism is functioning.

A protective means is also mounted above this guard hood 93 and in front of the plate carrying member to prevent an operator from inserting his fingers between the uppermost set of dies and the corresponding die plate, such means being in the form of a guard plate 96. This plate is normally substantially vertically disposed and is carried by a pair of leg bars 97, said leg bars each having its lower end provided with a notch or open and slot 98 and a slot 99, the latter being spaced inwardly of the former and adapted to receive a pin or bolt 100 which projects from the hood 93. The notches 98 are removably disposed over pins or bolts 101 which also project from the opposite ends of the guard hood 93. When it is necessary to remove the guard plate 96 to permit access to the plate carrying member or other adjacent parts of the machine, the same is raised vertically to disengage the notches 98 from the pins 101. The guard plate can then be moved laterally as indicated by the broken lines in Fig. 3.

The lower edge of the guard plate 96 is spaced above the flange 94 only a sufficient distance to permit a shoe tip or the like to be inserted into the machine and properly adjusted with respect to the perforating dies. A further advantage of this guard plate is that it holds the backing sheet 48' against the plate carrying member and consequently prevents the roll 51 from unwinding too rapidly.

Inasmuch as the guard hood 93 and guard plate 96 are both located adjacent the notched flanges 81 and 82 of the die and plate carrying members respectively, and as it is essential that the proper die engaging plate be arranged for cooperation with its corresponding set of dies, an indicator finger 102 is formed on said guard hood and a similar finger 103 projects from one of the leg bars 97 of the guard plate 96. The flanges 81 and 82 are provided with numbers or other symbols, one being used to designate each of the sets of dies and its corresponding plate 37. Thus when the indicator fingers 102 and 103 point toward the same symbols on the two flanges 81 and 82, the operator will know that the proper set of dies is

adapted to cooperate with the horizontally positioned die engaging plate 37.

The roller 52 on which the backing sheet 48' is automatically wound after passing through the machine is of improved design and comprises an outer sheet metal skeleton roll or shell 104 and a body or filler 105 disposed in the former and having a longitudinal central bore through which the roller shaft 52' extends. The shell 104 is split longitudinally and has one edge bent inwardly to form a longitudinal lip 106, which lip is disposed in a longitudinal groove 107 cut in the body 105; the shell can thus slide longitudinally of the body without rotation with respect thereto.

Spurs 108 are carried by the shell 104 and are disposed in spaced relation with the opposite longitudinal edge to that on which the lip 106 is formed. Thus when the backing sheet 48' is wound around the roller 52, the spurs 108 will engage in said sheet and prevent its slipping on the shell 104. After the roll 51 is exhausted and the complete backing sheet wound on the roller 52, the shell 104 may be slid from its body 105 to remove the used material forming the backing sheet. Owing to the fact that the shell 104 is split, it may be readily removed from this roll formed of the backing sheet by springing one edge portion beneath the lip 106 as indicated in Fig. 12, thus reducing its diameter and rendering the removal of the shell easy. Said shell may then be again placed on its body 105 for further operations.

Owing to the difference in the size of the roll of material on the roller 52 at various times, it is obvious that in order to roll up the surplus portions of the backing sheet, said roller must move a greater distance when the amount of material thereon is small than when the same is of large quantity. Therefore since the dog 61 always tends to move the ratchet 60 the same distance, I provide means for permitting slippage between the shaft 52' and the body 105. That is to say said body is provided with a cavity 109 in which is disposed an expansile spring 110, one end of said spring being engaged with the bottom of the cavity while the outer end contacts with an adjustable nut 111 on said shaft 52'. Normally the tension of the spring causes the shaft 52' and the body 105 to move in unison, but when the usual length of movement of the roller 52 is not necessary, said slippage takes place.

From the foregoing description taken in connection with the accompanying drawings it will be seen that a very simply constructed machine for accomplishing the desired objects of the invention has been produced and that the same will be very efficient in operation and use. Various minor changes may

be made in the several parts of the machine without departing from or sacrificing any of the principles or advantages thereof.

I claim:—

1. A machine of the class described comprising a cutting die, a plate carrying member disposed over the die, a die engaging plate on said member, means for causing the die and plate to engage, a backing sheet roll disposed over said member, the backing sheet being extended downwardly and between the die and plate, means for moving the backing sheet between said die and plate, and a substantially vertical guard plate engaging said backing sheet to force the same toward the plate carrying member.

2. A machine of the class described comprising a support for material to be operated upon, a die carrying member, a plurality of different cutting dies on the member, said member being movable to selectively align any one of said dies into operative position with respect to said support, means for holding the die carrying member in selected positions, a die engaging member intermittently movable into engagement with the selected cutting die, and means for intermittently moving the die engaging member, said means being inoperative when none of said dies are in alignment with said support.

3. A machine of the class described comprising a support for material to be operated upon, a die carrying member, a plurality of different cutting dies on the member, said member being movable to selectively align any one of said dies into operative position with respect to said support, means for holding the die carrying member in selected positions, a plate carrying member intermittently movable toward the dies, a plurality of die engaging plates on the last mentioned member, one being adapted to cooperate with each of said cutting dies when aligned therewith, said member being movable to procure such cooperation, means for holding the plate carrying member in selected positions, and means for intermittently moving the plate carrying member, said means being inoperative when any of the cutting dies or die engaging plates are out of alignment with said support.

4. A machine of the class described comprising a support for material to be operated upon, a die carrying member, a plurality of different cutting dies on the member, said member being movable to selectively align any one of said dies into operative position with respect to said support, means for holding the die carrying member in selected positions, a lever having a die engaging member on one end, a shaft, a connection between said lever and shaft whereby to rock the latter toward and away from

the cutting dies during each revolution of the former, a constantly rotating pulley revoluble on said shaft, a clutch for connecting the pulley and shaft, means for disengaging the clutch on each revolution of said shaft, and means for releasing the last mentioned means, said releasing means being inoperative when none of said dies is in alignment with said support.

5. A machine of the class described including a backing member for material to be operated upon, a die carrying member, a plurality of different cutting dies on the member, said member being movable to selectively move any one of said dies into operative position with respect to the backing member, means for procuring relative movement between said backing member and die carrying member, and means for preventing operation of said first means when none of the cutting dies are in operative position with respect to the backing member.

6. A machine of the class described including a rotative backing member having a plurality of die engaging surfaces, a rotative die carrying member, a plurality of different cutting dies on said die carrying member adapted to engage corresponding backing surfaces, means for procuring punching movement of one of said rotative members toward the other and means preventing such movement when none of the dies and backing surfaces are in opposition.

7. A machine of the class described including a rotative backing member having a plurality of die backing surfaces, a rotative die carrying member, a plurality of different cutting dies on said die carrying member adapted to engage corresponding backing surfaces, means for procuring punching movement of one of said rotative members toward the other, notched flanges carried by said rotative members, pawls engageable in the notches of said flanges to prevent rotation of the members, and means controlled by said pawls for preventing operation of said first named means when the pawls are disengaged from the notches.

8. A machine of the class described including a rotative backing member having a plurality of die backing surfaces, a rotative die carrying member, a plurality of different cutting dies on said die carrying member adapted to engage corresponding backing surfaces, means for procuring punching movement of one of said rotative members toward the other, notched flanges carried by said rotative member, pawls engageable in the notches of said flanges to prevent rotation of the members, a lever, a connection between said lever and the pawls for retracting said pawls from the notches upon movement of the lever, and means op-

erable by movement of the lever for preventing operation of said means for moving one of the rotative members.

9. A machine of the class described including a rotative backing member having a plurality of die backing surfaces, a rotative die carrying member, a plurality of different cutting dies on said die carrying member adapted to engage corresponding backing surfaces, notched flanges carried by said rotative member, pawls engageable in the notches of said flanges to prevent rotation of the members, a lever, a connection between said lever and the pawls for retracting said pawls from the notches upon movement of the lever, means for procuring movement of one of said rotative members toward the other including a continuously driven member, and a clutch connection with the said rotative member, and means carried by the lever for preventing operation of said clutch when the pawls are disengaged from their recesses.

10. A machine of the class described including a rotative backing member having a plurality of die backing surfaces, a rotative die carrying member, a plurality of different cutting dies on said die carrying member adapted to engage corresponding backing surfaces, means for procuring punching movement of one of said rotative members toward the other, notched flanges carried by said rotative members, pawls engageable in the notches of said flanges to prevent rotation of the members, a lever, a connection between said lever and the pawls for retracting said pawls from the notches upon movement of the lever, a hood positioned adjacent the die carrying member and movable away from said member, and a connection between said hood and the lever for moving said hood toward and away from said die carrying member upon movement of the lever.

11. A machine of the class described including a backing member, a rotatable die carrying member, a plurality of different cutting dies on the member, said member being rotatable to selectively move any one of said dies into operative position with respect to said backing member, a hood positioned adjacent said die carrying member and forming a support for work material inserted between the die carrying member and backing member, said hood being movable away from the die carrying member to permit rotation thereof.

12. A machine of the class described including a backing member, a rotatable die carrying member, a plurality of different cutting dies on the die carrying member, said member being rotatable to selectively move any one of said dies into operative position with respect to said backing mem-

ber, a hood positioned adjacent said die carrying member and forming a support for work material inserted between the die carrying member and backing member, said hood being movable away from the die carrying member to permit rotation thereof, and a guard plate carried by the hood and spaced therefrom to permit insertion of work material between the guard plate and hood.

13. A machine of the class described including a backing member, a rotatable die carrying member, a plurality of different cutting dies on the die carrying member, said member being rotatable to selectively move any one of said dies into operative position with respect to said backing member, a hood positioned adjacent said die carrying member and forming a support for work material inserted between the die carrying member and backing member, said hood being movable away from the die carrying member to permit rotation thereof, and a guard plate carried by the hood and spaced therefrom to permit insertion of work material between the guard plate and hood, said guard plate having pivotal connection with the hood, and means for preventing pivotal movement of the guard plate with respect to the hood.

14. A machine of the class described including a backing member, a rotatable die carrying member, provided with a longitudinal passageway therethrough, a plurality of different cutting dies on the die carrying members adapted upon rotation of the member to selectively move into operative position with respect to said backing member, means for moving the backing member toward the die carrying member, and a conveyer in said passageway of the rotatable die carrying member.

15. A machine of the class described including a cutting die, a die backing member for engagement with the cutting die, means for intermittently procuring engagement of the die and backing members, a pair of backing sheet rolls, a feed mechanism for one of said rolls having yieldable connection with the roll for winding the backing sheet thereon, and a positive feeding mechanism for the backing sheet adapted to move the backing sheet past the die backing member a predetermined distance incidental to each engagement of the die and backing member.

16. A machine of the class described including a backing sheet roller provided with a longitudinal groove in its periphery, a shell engageable on the roller and longitudinally split, an intumed flange at one longitudinal edge of said shell engageable in the groove of the roller and adapted to engage the other longitudinal edge of the shell to

hold the shell contracted, and outwardly extending spurs on the other longitudinal edge of the shell.

17. A machine of the class described including a main frame, a cutting die carried thereby, a pivoted lever, a die backing member carried by said lever, a cam shaft journaled in the frame, an eccentric member journaled on the lever, an arm mounted on
10 said eccentric member and engaging the cam

shaft, and means for adjusting said eccentric member with respect to the lever to vary the pressure of the die engaging plate upon rotation of the cam shaft.

In testimony that I claim the foregoing 15
I have hereunto set my hand at Milwaukee,
in the county of Milwaukee, and State of
Wisconsin.

ROBERT SCHWALBACH.

Part of Defendants' Exhibit K.

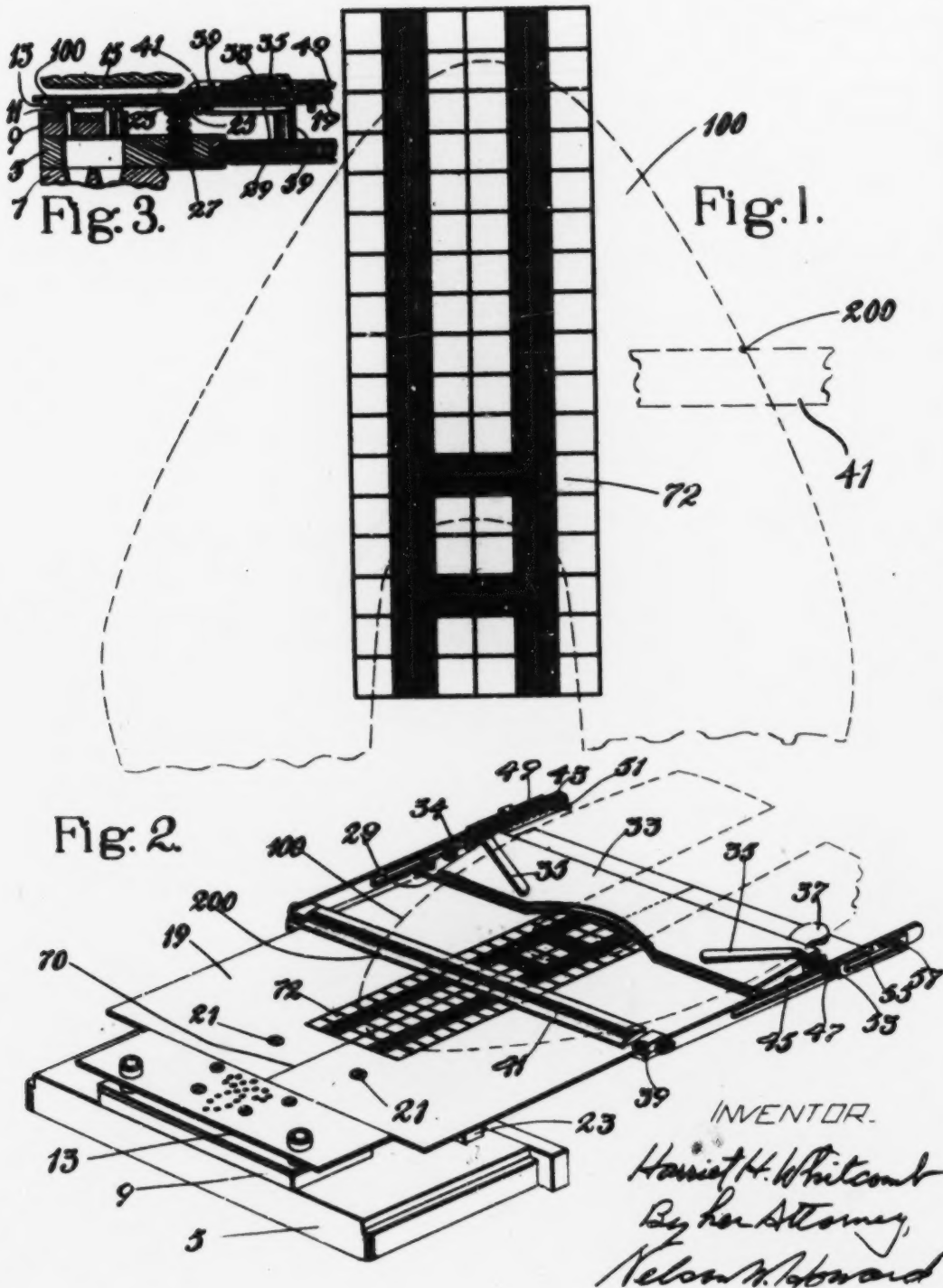
(Letters Patent No. 1,430,710 to H. H. Whitcomb,
October 3, 1922.)

716

H. H. WHITCOMB.
VAMP LOCATING DEVICE.
APPLICATION FILED FEB. 12, 1920.

1,430,710.

Patented Oct. 3, 1922.



UNITED STATES PATENT OFFICE.

HARRIET HITCHINGS WHITCOMB, OF LYNN, MASSACHUSETTS, ASSIGNOR TO UNITED SHOE MACHINERY CORPORATION, OF PATERSON, NEW JERSEY, A CORPORATION OF NEW JERSEY.

VAMP-LOCATING DEVICE

Application filed February 12, 1920. Serial No. 258,172.

To all whom it may concern:

Be it known that I, HARRIET H. WHITCOMB, a citizen of the United States, residing at Lynn, in the county of Essex and State of Massachusetts, have invented certain Improvements in Vamp-Locating Devices, of which the following description, in connection with the accompanying drawings, is a specification, like reference characters on the drawings indicating like parts in the several figures.

This invention relates to a device for facilitating the presentation of a piece of work in position to be operated upon and is herein illustrated as embodied in a device designed to facilitate the presentation of a vamp or a wing tip to the operating tool of a punching machine.

In the manufacture of boots and shoes, it is usual to ornament certain parts of the upper by punching designs therein by means of a gang punching machine. When it is desired so to use a pattern punch to ornament some of these parts, as the toe portion of a vamp or wing tip, difficulty is experienced in presenting the work to the machine in the proper symmetrical manner, especially since in machines commonly used for this work, it is impossible to see the part of the stock to be operated upon when it has been placed in position to be punched.

For purposes of illustration, the problem of properly presenting a vamp to receive an ornamental punched pattern in its toe portion will be considered, though it is to be understood, that the invention is in no way limited in its applicability to the punching of vamps.

The toe portions of vamps are not symmetrically cut on regular curves, and their outlines differ according as they are rights or lefts and according to their size. It frequently happens that there are used in a single factory vamps having several hundred different forms, the differences being due to differences in style as well as to the causes previously mentioned. This great variation makes difficult a successful use of edge gages. Moreover the longitudinal position of the pattern to be punched varies, being given as a distance from the center of the throat of the vamp, and this renders still less feasible the use of edge gages.

The throat of a vamp, however, whatever

its size and shape, is symmetrical with respect to the longitudinal axis passing through its center and through that part of the toe portion which ordinarily is ornamented by punching, and the present invention contemplates the utilization of this symmetry of the throat symmetrically to place the punching on the toe portion.

An object of the present invention, accordingly, is to provide simple and accurate means for properly presenting the desired portions of vamps or other irregularly shaped pieces of stock to mechanism for operating upon them. In the illustrated embodiment of the invention, this is accomplished by the provision of a group of symmetrical figures, such as squares, symmetrically arranged with respect to the center line of a support on which the work may be positioned previously to its presentation to the operating means. When the arrangement of these figures visible through the throat of the vamp is symmetrical, the center line of the vamp will coincide with, or will be superimposed upon, the center line of the support, and when the vamp is moved forward in the direction of this center line a predetermined distance, the vamp will be in the correct position to be operated upon.

Further features of the invention lie in the making of these symmetrically arranged symmetrical figures of a plurality of visually distinct groups, as by using a plurality of contrasting colors, the exemplified embodiment of the invention having squares of two colors, and in the use of heavy lines of demarkation between the different figures. It has been found that the use of these contrasting colors and heavy lines is of material assistance in rapidly positioning the work.

In another aspect the invention contemplates the combination with a work support marked in the above manner, of means for moving the work a predetermined distance after it has been correctly positioned upon the work support, to present it in the desired relation to the operating means.

In speaking of the stock to be operated upon, the term "vamp" has been repeatedly used throughout the specification and claims. This has been done for the sake of convenience and brevity, and that term is not intended to be understood in a limiting man-

ner, but to include, as well as vamps in a literal sense, wing tips and other blanks or articles capable of being handled in this way.

- 5 The foregoing and other features of the invention, including certain details of construction and combinations of parts, will be described as embodied in an illustrative machine and pointed out in the appended claims.

10 In the drawings,

Fig. 1 illustrates diagrammatically the arrangement of the squares of the centering device of this invention;

- 15 Fig. 2 is a perspective view of a vamp gage in which the centering device is embodied; and

Fig. 3 is a cross-sectional view showing the relation of the vamp and gage, when in perforating position, to the punches and anvil of a perforating machine with which the invention may be used.

- The centering device of the present invention is adapted for use in connection with a 25 perforating machine and gage such as that shown in the application of Harry R. Stanbon, Serial No. 298,048, filed May 19, 1919, for a vamp gage for punching machines. For purposes of illustration it is shown as 30 so embodied though of course it is in no way limited in its utility to such a machine. This machine comprises a punch plate holder 5 which rests upon a suitably constructed portion of the frame 7, a punch plate 9 which is 35 carried by the punch plate holder, a series of punches 11 arranged in a pattern, for instance as shown in Fig. 2, a yieldingly sustained stripper plate 13 provided with holes through which the punches may be forced, 40 and a reciprocable punch block or plunger 15. The punch block may be driven in any suitable manner as by a one-revolution clutch which causes the shaft to make one revolution and then come to rest with the punches, 45 punch block and stripper plate in the relation of Fig. 3 to permit withdrawal of the punched blank and presentation of a succeeding one. It will be understood that if a portion of a blank is placed on the stripper 50 plate 13 over the punches and the clutch thrown in, the blank will be punched.

- Abutting at its forward end against the stripper plate 13 and yieldingly held at the same level as the stripper plate is a work 55 support 19 in the form of a plate of sheet metal. This supporting plate may, if desired, be integral with the stripper plate since the two plates always preserve the same relation to each other and are moved up and down together. In the illustrated machine 60 the supporting plate 19 is fastened by screws 21 to a bar 23 which is fast to the upper ends of a plurality of pins 25 vertically slidable in sockets in the punch plate holder. Springs 27 encircle the pins and are of sufficient

strength to sustain the parts in the position shown in Fig. 3, it being understood that when the punch block 15 is moved downwardly the stripper plate 13 and supporting plate 19 are forced downwardly in unison 70 and that when the punch block rises the plates rise into the position shown. Slidably mounted on the support 19 is a vamp holder having a carrier 29. A clamping plate 33 is pivoted at opposite ends to lugs 34 on the carrier. Leaf springs 35 fastened at their rear ends to lugs 34 urge downward the forward end of clamping plate 33 to grip the vamp in the manner shown in Fig. 2. A 75 finger piece 37 fast to the plate 33 furnishes means whereby the plate may be tilted about its pivots to permit the vamp to be placed in and removed from the holder. Mounted on the supporting plate 19 in advance of the 80 vamp holder is a guiding device for locating the vamp in the holder, said device comprising a guide carrier 39 and a guide, shown as a straight edge 41. The guide carrier 39 may be connected with the holder carrier 29 by 85 bars 43 provided with slots 45 through which extend loosely the stems of screws 47 which are threaded into the lugs 34 of the holder carrier. Springs 49 connected at their rear 90 ends to pins 51 on the bars 43 and at their forward ends to the lugs 34 normally maintain the guide spaced from the vamp holder as shown in Fig. 2, the extent of the separation being determined by the position of stops 53 which are adjustably mounted on the bars 43. These stops are slotted at 55 to 100 receive the stems of screws 57 which hold them in adjusted position on the bars 43.

The plate 19 may conveniently be provided with a center line 70 and symmetrically arranged with respect to this are a series of 105 regular markings illustrated as squares 73 separated by rather heavy lines. To facilitate the accurate placing of the vamp in the gage it is desirable to make the squares of two contrasting colors, for instance one 110 group of squares may be white or of a light color and the other group of a dark color, the squares of each color being arranged so as to be bilaterally symmetrical with respect 115 to the center line 70. In the illustrated embodiment the outer longitudinal rows of squares are white, the longitudinal rows adjacent to these are red, and the two median rows are white with the exception of two 120 pairs of squares arranged toward the rear and in such a position that parts or the whole of one or both of these pairs of squares will ordinarily be visible through the 125 throats of the vamps of the different sizes to be operated upon. It is to be understood that this specific arrangement of squares is shown for illustrative purposes only and that it is not essential that the figures be squares but simply that they be of a simple 130 symmetrical form arranged in a simple pat-

tern symmetrical with respect to the line with respect to which the work is to be positioned.

Assuming now that a vamp 100 is provided with a suitable locating mark such as 200 upon the broad side thereof, that is, upon the right side of a right vamp or the left side of a left vamp, and that the guide 41 has been correctly positioned with respect to the vamp holder, the vamp is placed in the holder with the mark 200 in alinement with the front edge of guide 41 and in such a position that the arrangement of the squares visible in the throat thereof is symmetrical, as clearly shown in Fig. 1. The position of the vamp longitudinally in the holder is thus determined by the relation of the guide 41 to the holder and the correct location of the vamp laterally of the support 19 is easily determined by the operative in accordance with the appearance of the squares and parts of squares visible through the throat of the vamp. In order to facilitate adjustment of the stops 53, these stops may be provided with pointers which co-operate with a suitably graduated scale on the bars 43, as shown in Fig. 2, and in order to facilitate grasping the vamp holder to push it forward two pins 59 project from its under side.

The operation of the device is as follows: The operator is furnished with vamps marked as indicated at 200 and is also furnished with data showing how far from the throats of the vamps the center of the pattern punching is to be located. With this data he first sets the stops 53. He next inserts a vamp in the holder with the mark 200 registering with the forward edge of the guide 41 and in such a position that the squares and portions of squares visible through the throat of the vamp on both sides are symmetrical. Then grasping the vamp holder with his thumbs and forefingers, he pushes the holder to the punching mechanism. Both the guide and the holder move forward until the guide carrier 39 contacts with and is arrested by the bar 23 which serves as a stop. Thereafter the holder moves forward until its carrier 29 is arrested by contact with the guide carrier 39 at which time the toe portion of the vamp is properly located with respect to the punching mechanism and punch block 15 is caused to descend.

Fig. 2 shows in perspective and Fig. 1 diagrammatically the vamp properly located in the vamp holder ready to be advanced. Fig. 3 shows the vamp in position to be punched, the springs 49 being extended, the guide carrier 39 in contact with the bar 23, and carrier 29 in contact with carrier 39.

Although the invention has been set forth as embodied in a particular machine it is to be understood that the invention is not

limited in the scope of its application to the particular machine shown and described.

Having described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:

1. A machine of the class described having, in combination, means for operating upon the forward portion of a vamp, a work support provided with a symmetrically arranged group of symmetrical figures so that the vamp may be accurately positioned in accordance with the visibility of the figures through the throat of the vamp, and means for transferring the vamp from the work support to the operating means.

2. A machine of the class described having, in combination, means for ornamenting the forepart of a vamp, a work support, a group of symmetrically arranged symmetrical markings on the work support for locating the vamp symmetrically with respect to the ornamenting means, and means for engaging the vamp to move it forward into operative relation to the ornamenting means without disturbing its arrangement symmetrically with respect thereto.

3. A machine of the class described having, in combination, perforating means, a work support to hold a blank to be perforated, a work carrier movable over the work support to present the blank to the perforating means, and a group of markings upon the surface of the work support arranged to co-operate with a characteristic of the blank for accurately locating the blank in the work carrier.

4. A machine of the class described having, in combination, a work support having a surface marked off into a series of symmetrically arranged symmetrical figures, perforating means, and a work carrier to transfer the work from the work support to the perforating means.

5. A machine of the class described having, in combination, a work support having a surface marked off by a number of heavy lines into a series of symmetrically arranged symmetrical figures, perforating means, and a carrier to transfer the work from the work support to the perforating means.

6. A machine of the class described, having, in combination, a work support having a surface provided with a series of symmetrically arranged symmetrical figures, said figures being of two contrasting colors, the figures of each color being symmetrically arranged upon said surface, perforating means, and a carrier to transfer the work from said work support to the perforating means.

7. A machine of the class described, comprising a punch and punch block, and a work support having a surface provided with a group of symmetrical markings, said group of markings and said punch being

both arranged symmetrically with respect to the same axis of symmetry.

8. A machine of the class described having, in combination, means for operating upon the forward portion of the vamp, a work support to hold the vamp to be operated upon, a work carrier movable over the work support to present the vamp to the operating means, and a group of markings upon the work support symmetrically arranged with respect to an axis passing through the operating means so that when a vamp is positioned on the work support in such a manner that the markings visible through its throat are symmetrically arranged, the center line of the vamp will coincide with said axis.

9. A machine of the class described having, in combination, perforating means, a work support to hold a blank to be perforated, a work carrier movable over the work support to present the blank to the perforating means, means to position the blank longitudinally with respect to the work carrier, and a group of markings upon the surface of the work support arranged to co-operate with a characteristic of the blank for accurately locating the blank in the work carrier.

10. A machine of the class described having, in combination, perforating means, a work support to hold a vamp to be perforated, a work carrier movable over the work support to present the vamp to the perforating means, means to position the vamp longitudinally with respect to the work carrier, and a number of symmetrical figures upon the surface of the work support symmetrically arranged with respect to an axis passing through the perforating means, the different figures being of two contrasting colors and the figures of each color being symmetrically arranged with respect to said axis to facilitate the symmetrical positioning of the throat of the vamp upon the work support.

11. A machine of the class described having, in combination, perforating means, a work support to hold a vamp to be perforated, a work carrier movable over the work support to present the vamp to the perforating means, a straight edge to co-operate with a mark upon the vamp to position the vamp longitudinally with respect to the work carrier, and a number of heavy lines marked upon the work support and forming symmetrical figures symmetrically arranged with respect to an axis passing through the perforating means so that when a vamp is positioned on the work support with its throat symmetrically arranged with respect to said axis it may be moved by the carrier to work perforating position.

12. A machine of the class described having, in combination, perforating means, a

work support, to hold a vamp to be perforated, a work carrier movable over the work support to present the vamp to the perforating means, means to position the vamp longitudinally with respect to the work carrier, and a group of markings upon the work support, symmetrically arranged with respect to an axis passing through the perforating means so that when a vamp is positioned on the work support in such a manner that the markings visible through its throat are symmetrically arranged, the center line of the vamp will coincide with said axis.

13. A device for positioning vamps with respect to an operating mechanism, comprising a straight-edge for co-operation with a mark on the vamp and a flat member having a surface provided with a group of symmetrically arranged figures so located that when the vamp is arranged with its throat symmetrical with respect to the group of figures the vamp will be symmetrically arranged with respect to the operating mechanism.

14. A device for facilitating the presentation of a piece of work to operating mechanism so constructed that the portion of the work to be operated upon is not visible to the operator when the blank is in position to be operated upon, comprising a work support, a blank holder movable over the work support from a position in which the blank held therein is in full view of the operator toward the mechanism, and a group of markings upon the surface of the work support arranged to co-operate with a characteristic of the work for accurately locating the work in the holder.

15. A vamp positioning device comprising a supporting surface provided with a number of symmetrical markings arranged in a bi-laterally symmetrical group, so that when a vamp is positioned in such a manner that the arrangement of the markings visible through its throat is bi-laterally symmetrical, the center line of the vamp will be superimposed upon the axis of symmetry.

16. A machine for perforating vamps, having, in combination, operating means comprising a punch and a punch block, a support for vamps, and means for positioning the vamps with reference to the operating means, comprising a number of polygons marked off on the support and arranged symmetrically about an axis.

17. A device for positioning vamps, comprising a vamp supporting surface marked off into a number of polygons, the polygons being arranged in groups having contrasting colors to facilitate positioning the vamps.

18. A device for positioning vamps comprising a surface marked off into a number of polygons, said polygons being of two

contrasting colors the polygons of each color forming a group symmetrical with respect to a single axis of symmetry.

19. In a device for positioning blanks, a surface marked off by a number of heavy lines into a number of squares, said squares being of two contrasting colors, the squares of each color forming a group symmetrical with respect to a single axis of symmetry.

20. A device for positioning blanks comprising a surface provided with two visually distinguishable groups of symmetrical figures, the two groups being symmetrically arranged with respect to a single axis of symmetry.

21. A device for positioning blanks comprising a surface provided with two groups of symmetrical figures, the two groups being symmetrically arranged with respect to a single axis, the figures of the first group being of a color contrasting with that of the figures of the second group.

22. A device for positioning blanks comprising a surface marked off into a plurality of rows of squares, the squares of the outer rows being of a color contrasting with that of the squares of the rows adjacent thereto, the arrangement of squares of each color being symmetrical with respect to a median line.

23. A device for positioning blanks com-

prising a surface marked off by a number of heavy lines into a plurality of rows of squares, the squares of the outer rows being of a color contrasting with that of the squares of the rows adjacent thereto, and the median squares being some of one color and some of the other, the arrangement of squares of each color being symmetrical with respect to a median line.

24. A device for positioning blanks comprising a surface marked off by a number of heavy lines into a number of symmetrical figures symmetrically arranged with respect to an axis of symmetry, the figures forming a plurality of groups, each group being symmetrical with respect to said axis, and the figures of each group being of a color contrasting with that of the figures of the other groups.

25. A device for positioning blanks comprising a surface marked off by a number of heavy lines into a number of symmetrical figures symmetrically arranged with respect to an axis of symmetry, the figures forming two groups, each group being symmetrical with respect to said axis, and the figures of one group being of a color contrasting with that of the figures of the other group.

In testimony whereof I have signed my name to this specification.

HARRIET HITCHINGS WHITCOMB.

Part of Defendants' Exhibit K.

**(Letters Patent No. 1,434,060 to W. F. Lautenschlager,
October 31, 1922.)**

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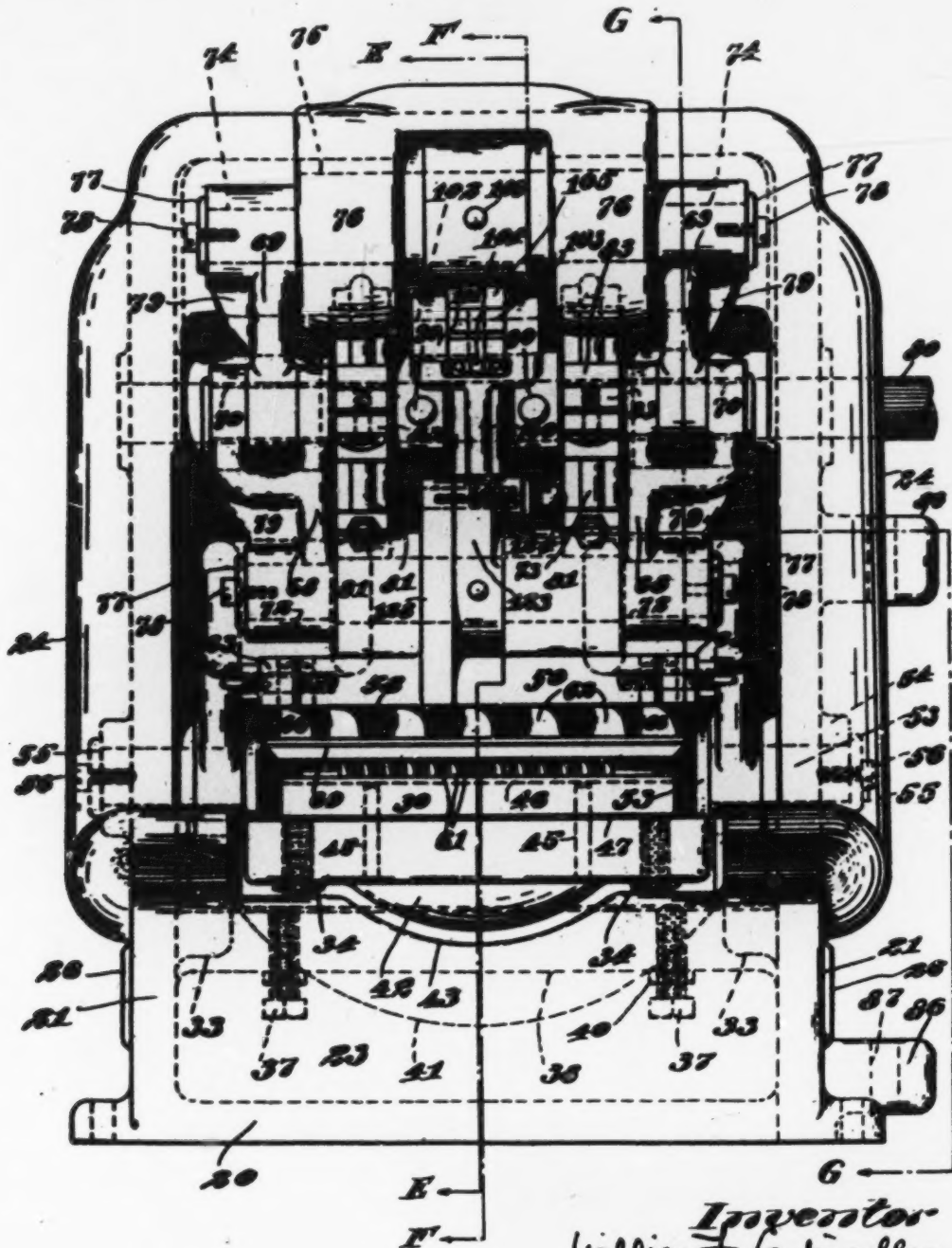
W. F. LAUTENSCHLAGER.
PERFORATING MACHINE.
APPLICATION FILED NOV. 3, 1921.

1,434,060.

Patented Oct. 31, 1922.

7 SHEETS—SHEET 1.

Fig. 1.



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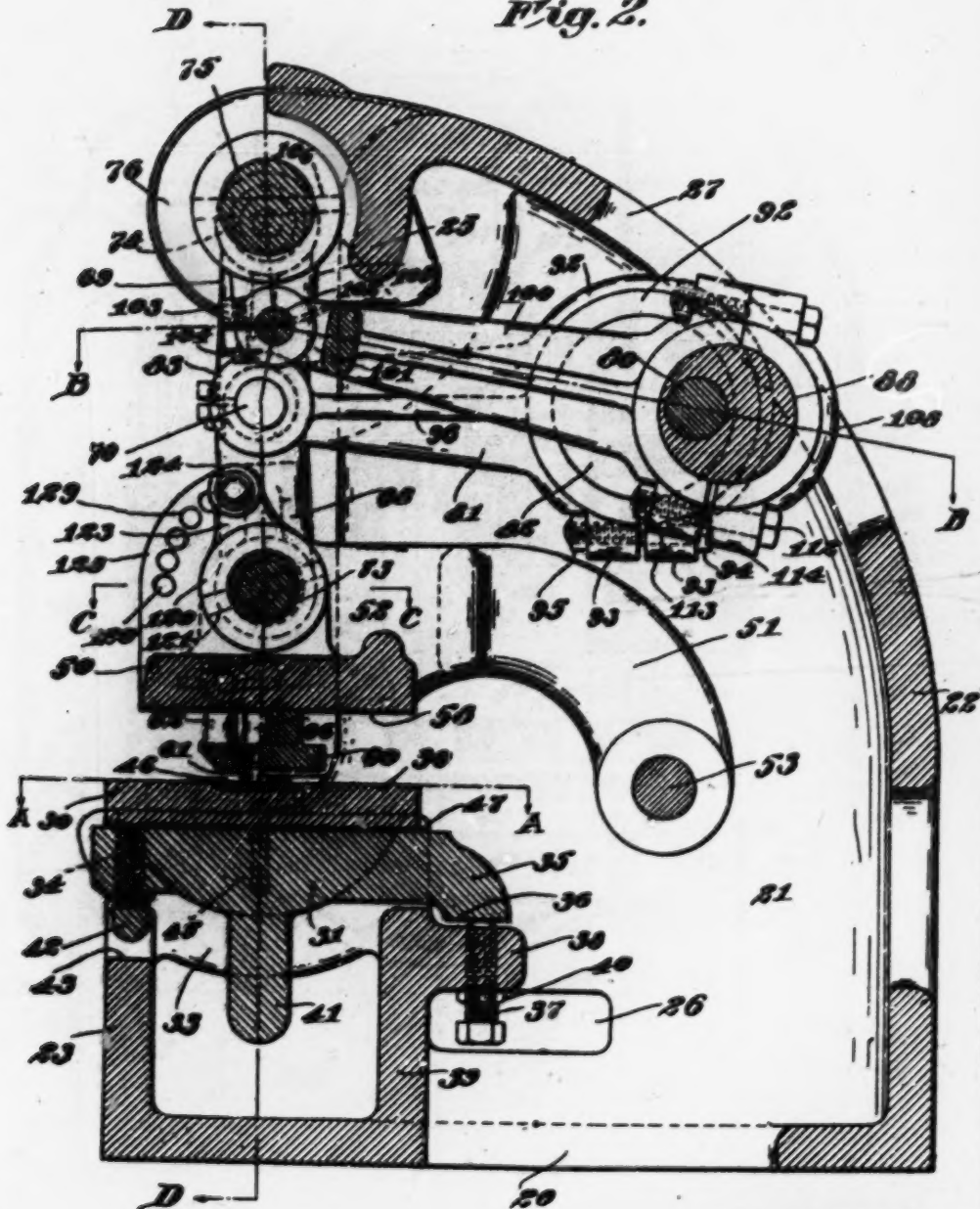
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7 SHEETS—SHEET 2.

Fig. 2.



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7 SHEETS—SHEET 3.

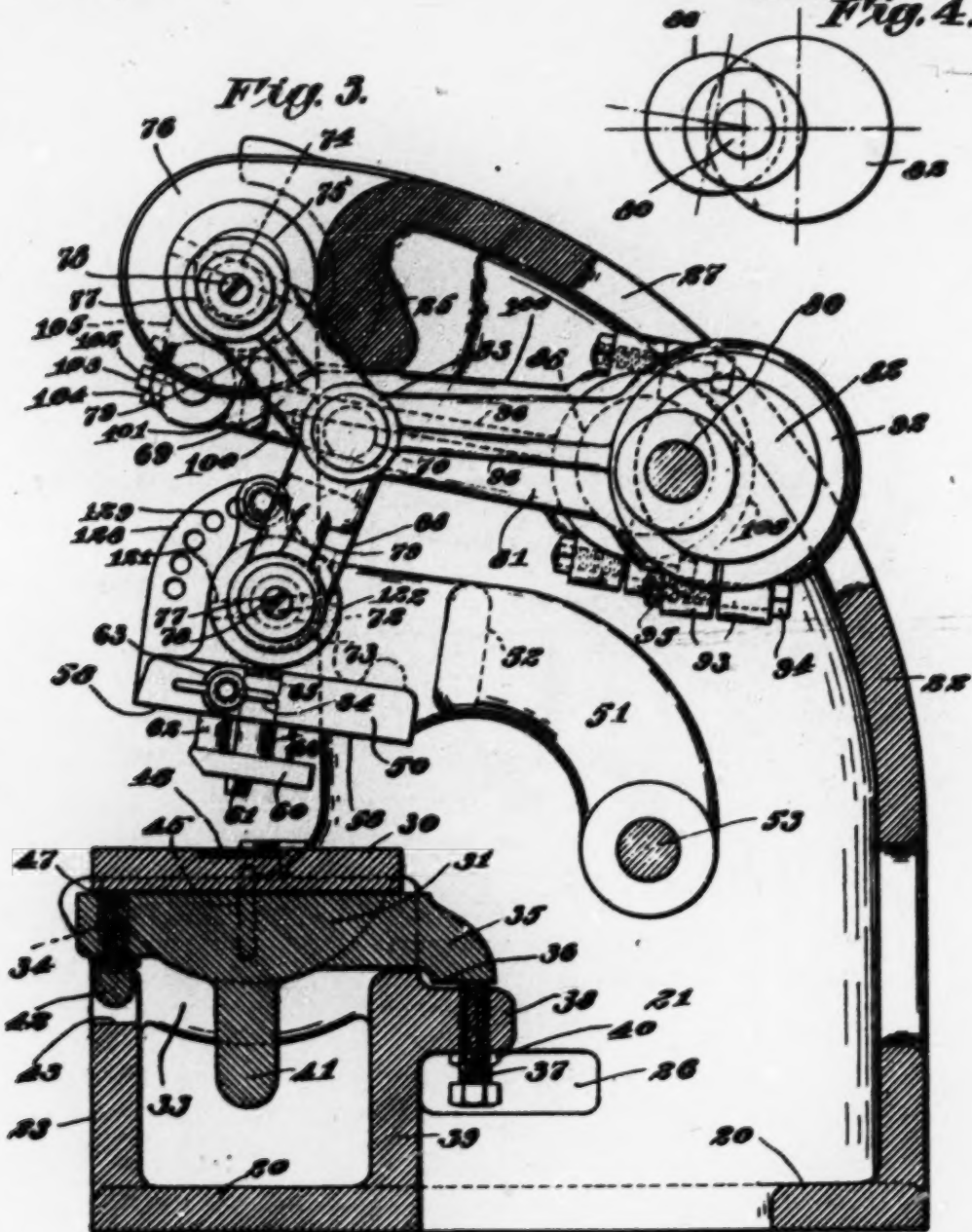
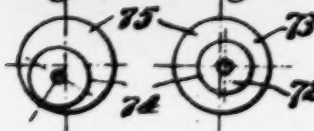


Fig. 5. Fig. 6.



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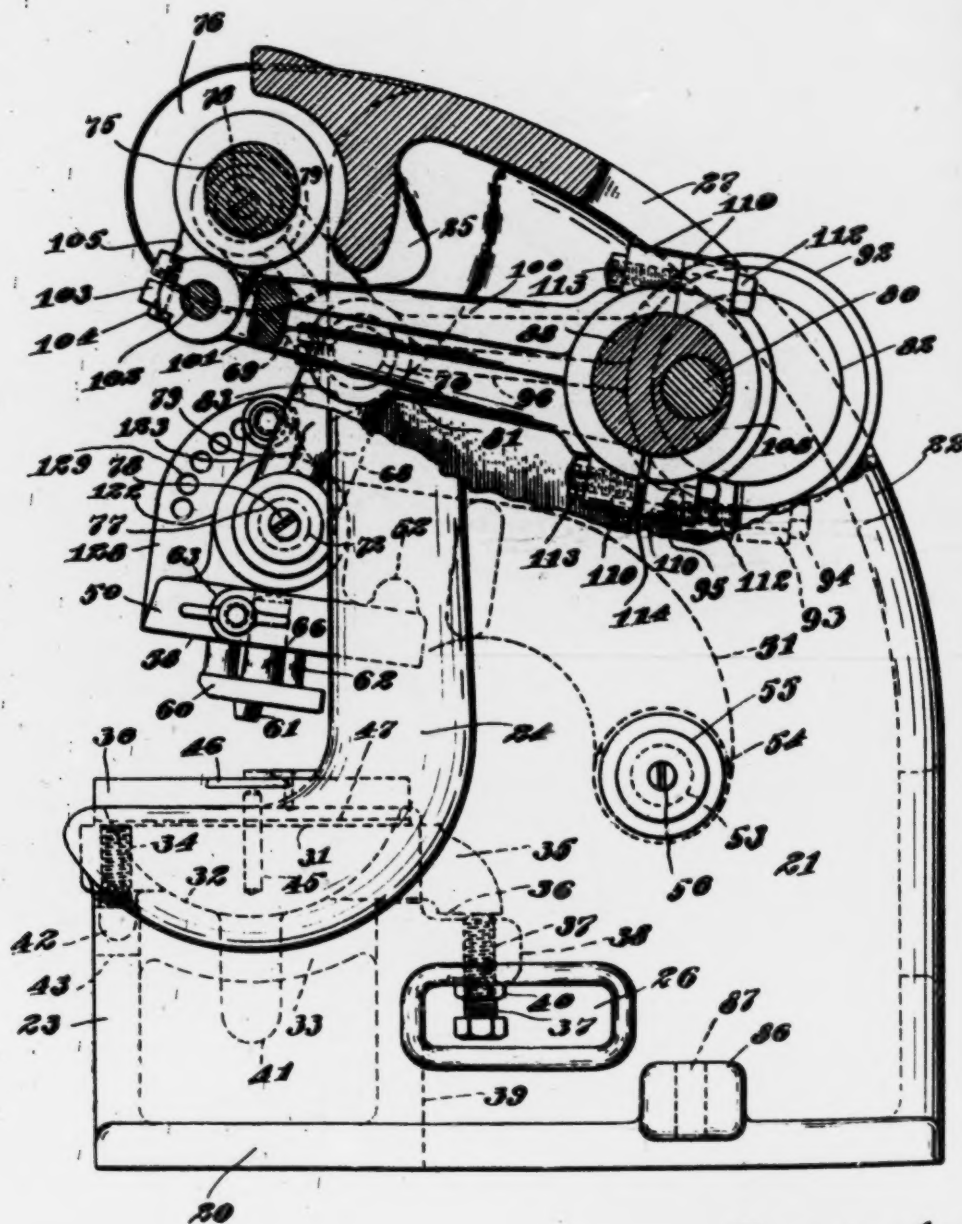
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7 SHEETS—SHEET 4.

Fig. 7.



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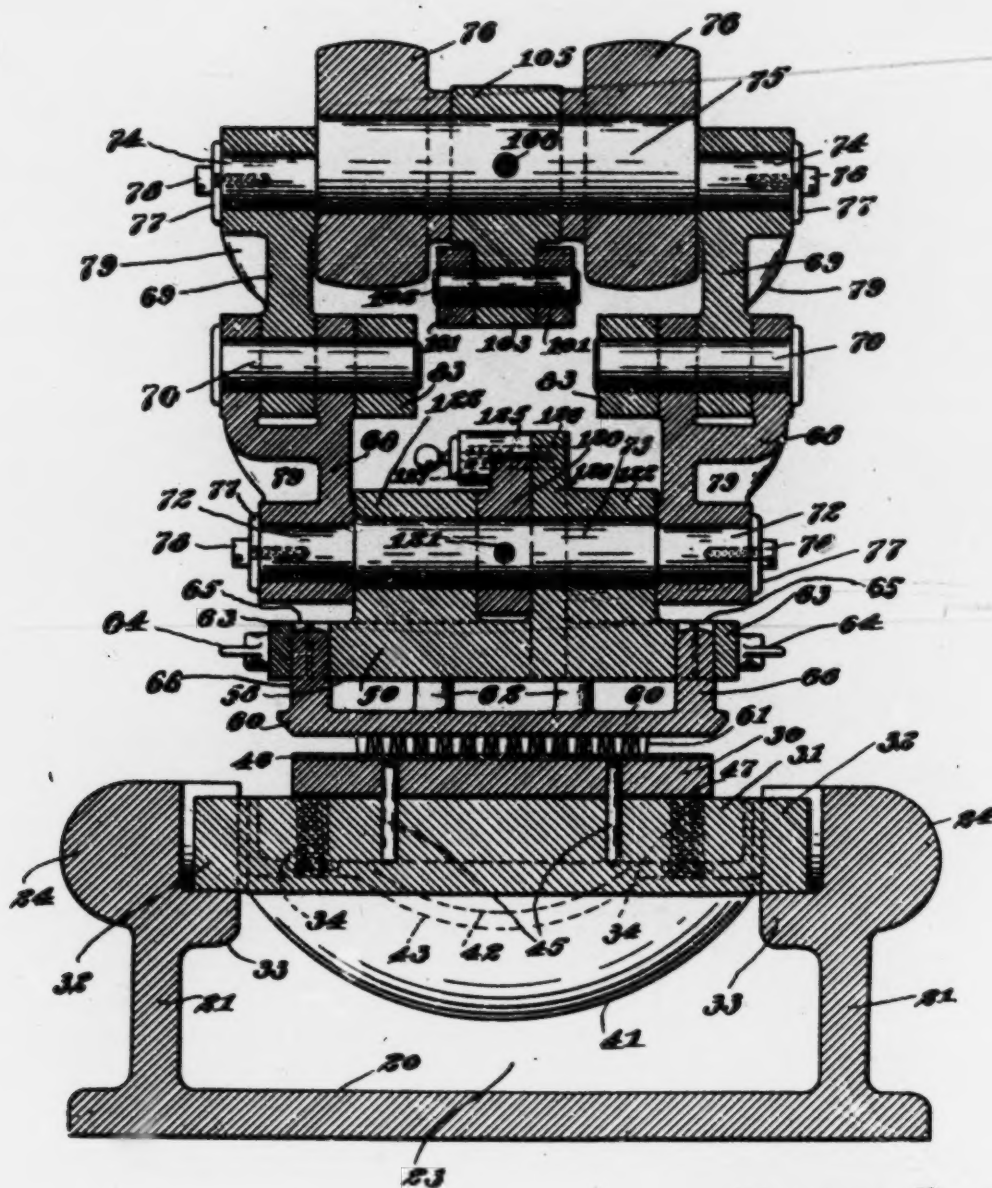
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7 SHEETS—SHEET 5.

Fig. 6.

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1,434,060.

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7 SHEETS—SHEET 6.

Fig. 9.

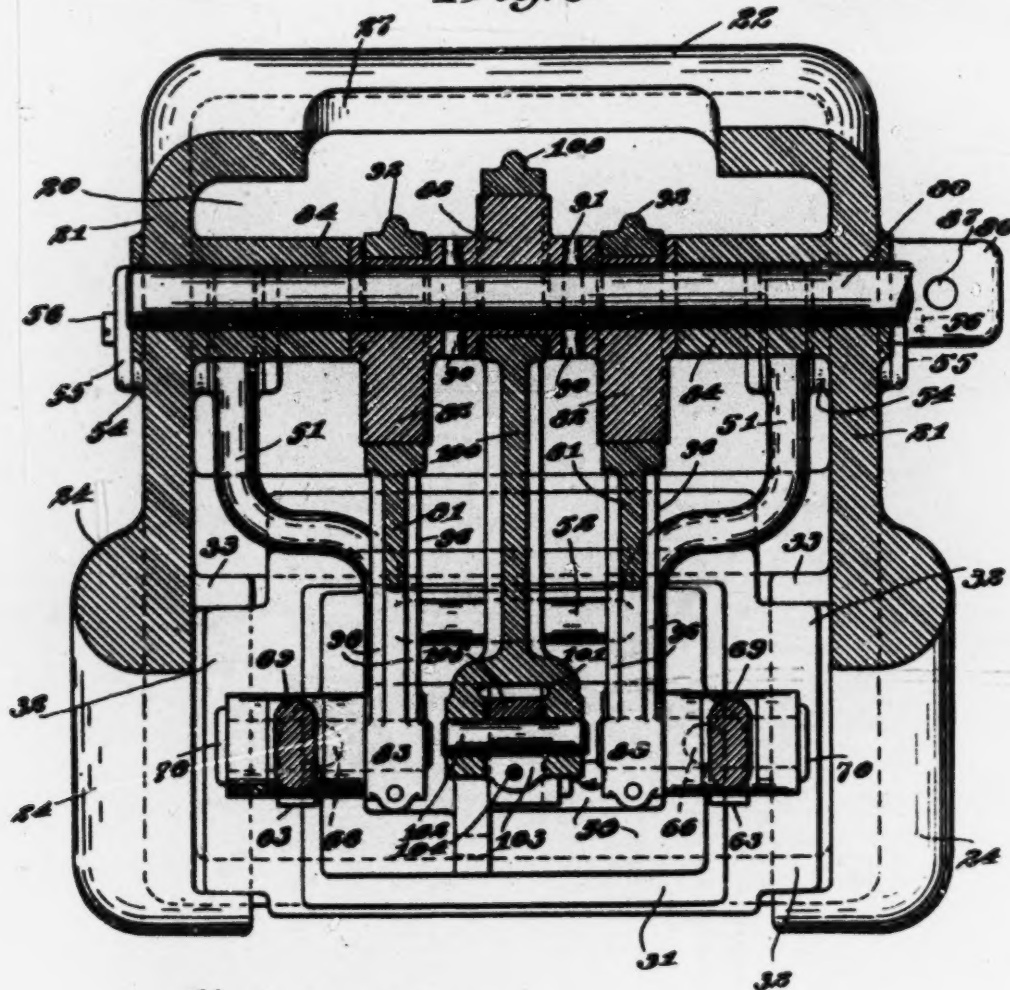
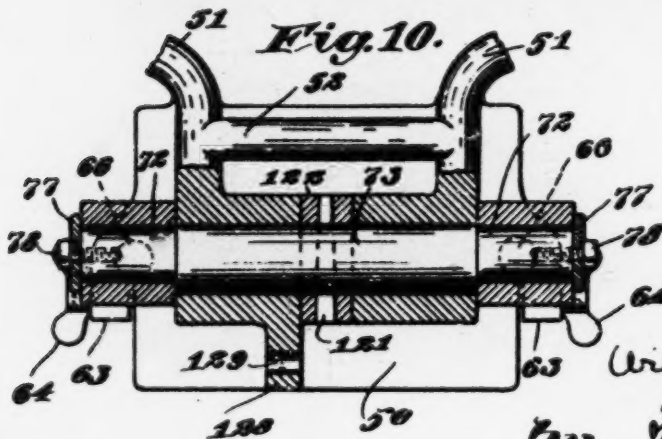


Fig. 10.



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7 SHEETS—SHEET 7.

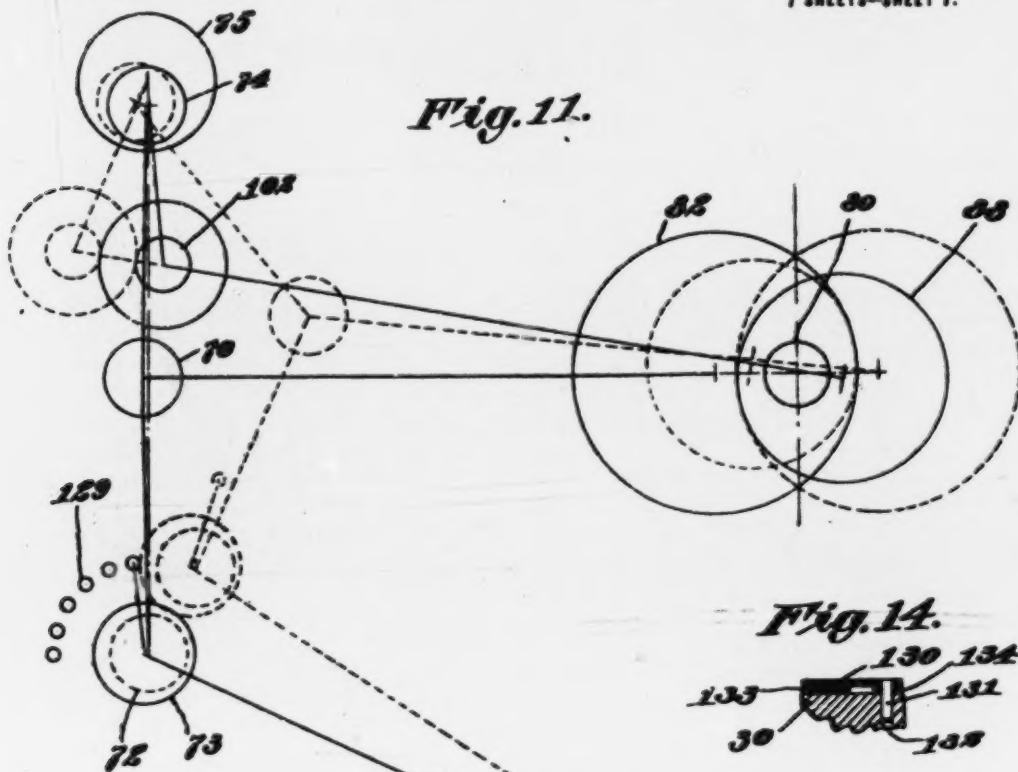


Fig. 11.

Fig. 14.

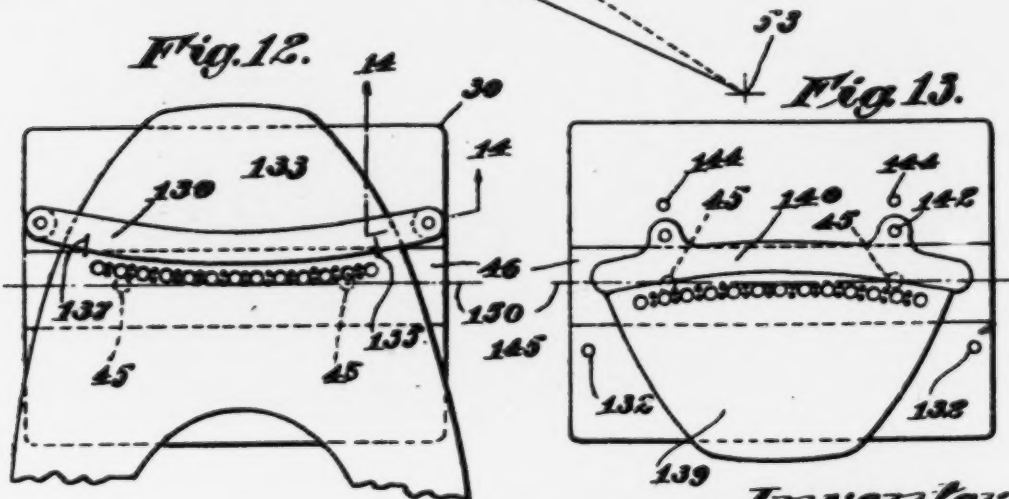


Fig. 12.

Fig. 13.

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Patented Oct. 31, 1922.

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1,434,000

UNITED STATES PATENT OFFICE.

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PERFORATING MACHINE.

Application filed November 2, 1921. Serial No. 512,000.

To all whom it may concern:

Be it known that I, WILLIAM F. LAUTENBACH, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Perforating Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to perforating machines and more particularly to a machine of that class in which a die carrying plunger is employed for perforating a complete pattern or design upon each operation.

15 Heretofore, most of the machines of the above character have been open to a serious objection, namely, that the operator is unable, at any time, to have an unobstructed view of the work-support. This has been
20 due to the fact that in these machines the plunger moves vertically through a very short stroke and even when in a raised position, the plunger is so close to the work-support that the latter cannot be seen by
25 the operator. In the use of such machines the operator is obliged to place the work upon the work-support and in engagement with the gauge through the sense of touch alone, in consequence of which it is difficult
30 to secure the proper placing of the perforations on the shoe part. Frequently, because of this inability to see the work-support, the perforated design is misplaced, rendering the shoe parts worthless and involving a serious loss of time and material.
35 At the same time, the inability of the operator to see the work and the desire to prevent mistakes, has the effect of slowing down the perforating operation of the machines of this character, thereby increasing the cost of operation.

The main object of my invention is the provision of a perforating machine employing a die carrying plunger in which the
40 work can be seen by the operator when placed in position upon the work-support, and I accomplish this end by having the plunger pivotally mounted and means for operating the plunger so arranged that not
50 only is the length of the stroke of the plunger increased but the forward side of the plunger is turned upwardly at an angle to the work-support in order to permit a full view of the entire work-support when
55 the plunger is in a raised position.

Another object of the invention is the provision of a machine which is simple and efficient both in construction and operation and which may be operated with comparative rapidity.

60 A further object is the provision of a machine in which clear and distinct perforating may be obtained even though the perforating edges of the die may be slightly dull, and to accomplish this result I provide
65 means whereby a heavy pressure is exerted in a downward direction upon the plunger at the end of its downward stroke.

An additional object of the invention is the provision of a machine capable of being
70 used for all kinds of pattern perforating, and to this end I provide dies so mounted that they are capable of being reversed upon the plunger in order to enlarge the scope of the work done by the machine.

75 Another object is the provision of means carrying the work-support so constructed as to be capable of accurate adjustment and which requires no further adjustment after the initial one.

80 Other objects of the invention will be more specifically set forth and described hereinafter.

One of the important features of my invention consists in so mounting the die
85 carrying plunger that a clear and unobstructed view of the work-plate is afforded the operator when the plunger is in its normal raised position. Preferably, I accomplish this result by pivotally mounting the
90 plunger on a centre which is in the rear of the work-support and away from the operator, but in the same plane as the upper face of the work-support. The raising of the plunger around its pivot line thereby tilts
95 the forward edge of the plunger upwardly, thereby exposing the entire work-support to the view of the operator. At the same time, this construction permits the plunger to be given a longer stroke. The advantages of
100 this feature are important; it insures absolute correctness in the positioning of the work upon the work-support and against the gauge, thereby preventing the damage now common in machines where the operator is
105 unable to see the work and also increases the speed at which the operator can adjust the work in position and operate the machine.

Another important feature of my invention resides in the means provided for giving

ing the final pressure to the plunger to accomplish the perforating operation. The use of a pivotally mounted die carrying plunger makes it difficult, as a mechanical proposition, to exert sufficient final pressure upon the plunger without constructing the means for operating the plunger of extreme size. This is especially true where the movement of the plunger is accomplished by the use of eccentrics or equivalent means. In order to avoid this complication I provide means by which the final pressure upon the plunger is exerted in a downward direction upon its end, said means being so arranged as to be capable of a fine adjustment in order to regulate this final pressure, and the final movement of the plunger, due to this pressure. This construction insures a clean cutting of the perforations even although the dies may be somewhat dull, and the fine adjustment enables the dies to be used for a long period without excessive wear.

Yet another important feature of my invention resides in the provision of a tube die and a work-support of such form as to be capable of reversal in the machine in order to extend the scope of the work handled by the machine. In the use of a machine of this character in the shoe industry, it is necessary in perforating shoe tips to place the work in the machine with the toe portion of the tip toward the operator and in perforating vamps with what is termed imitation tip perforating, because no shoe tip is used on the shoe, the vamp is placed in the machine with the toe portion away from the operator. Heretofore, in order to take care of these two kinds of work, it has been necessary to provide either two machines or two dies. In some cases it has been possible to do both of these kinds of work on a single machine, yet that has required the use of two tube dies which involves a very large expense because tube dies for this purpose are extremely expensive. In my machine, however, I am enabled to use one die for doing both kinds of work by merely reversing the die and work-support in the machine without requiring any other adjustment. My method of doing this requires a few additional gauges only, but as these gauges are of simple construction, it involves a comparatively small expense.

In the drawings illustrating one embodiment of my invention, Figure 1 is a front elevation of a machine constructed and adapted to be operated in accordance therewith, showing the plunger in perforating position at the end of its downward stroke; Fig. 2 is a vertical sectional view on line E-E in Fig. 1; Fig. 3 is a vertical sectional view on line F-F in Fig. 1, but showing the plunger in a raised position; Fig. 4 is a diagrammatic view of the eccentrics on the main shaft for operating the toggle joints

in the position shown in Fig. 3; Figs. 5 and 6 are similar views of the eccentrics at the upper and lower ends respectively of the toggle joints in the positions shown in Fig. 3; Fig. 7 is a side elevation of the machine partly in section on line G-G in Fig. 1; Fig. 8 is a vertical sectional view on line D-D in Fig. 2; Fig. 9 is a cross sectional view on line B-B in Fig. 2; Fig. 10 is a cross-sectional view on line C-C in Fig. 2; Fig. 11 is a diagrammatic view showing in dash lines the positions of the various parts of the machine in its normal position of rest with the plunger raised and in full lines the positions of the various parts when the plunger is in operative, that is, perforating position; Fig. 12 is a plan view of the work-support on line A-A in Fig. 2 showing a shoe vamp in position to receive imitation perforating; Fig. 13 is a similar view of the work-support showing a shoe tip in position to be perforated, the die being reversed; and Fig. 14 is a sectional view on line 14-14 in Figure 12.

In the drawings illustrating the preferred embodiment of my invention, there is shown a frame which may be of any suitable form, but preferably comprises a base 20, two sides 21 and a back 22 curving upwardly and toward the front which is open with the exception of a front plate 23 extending a short distance upwardly from the base 20. The frame is of substantial construction adapted to withstand the operation of the machine and may be strengthened by rounded projecting ribs 24 on the sides 21, and a depending cross rib or flange 25 at the top. Openings 26 may be provided in the side plates to permit access to adjusting screws and an opening 27 in the back 28 is required for the main shaft eccentrics.

For supporting the work in the machine, a work-support 30 is mounted on a bed-plate 31, which is provided with ends 32 adapted to rest on flanges 33 formed on the inner faces of the sides 21 of the frame. The engaging faces of the ends 32 and flanges 33 are cut on a circle whereby the bed-plate may be turned laterally in one direction or the other upon said flanges as bearings in order to secure proper lateral adjustment, and for this purpose headed adjusting screws 34 are threaded into the front portion of the bed-plate. The heads of the screws 34 engage the top of the front plate or web 23 of the frame, and by turning the screws in one direction or the other, the front side of the bed-plate may be raised or lowered as desired. The rear side 35 of the bed-plate is turned downwardly and provided with a face 36 adapted to engage screws 37 threaded through a flange 38 formed on an upright web 39 constituting a part of the frame. The screws 37 may be secured in adjusted position by lock-

washers 40 and preferably the adjusting of the bed-plate is done by the manipulation of the screws 37 alone. To increase the strength of the bed-plate which is subjected to considerable pressure during the perforating operation, it may be provided with a central flange 41 and a smaller parallel flange 42 on its front side. The front plate or web 28 of the frame is cut away on a curved line at 43 to correspond to the flange 42.

For holding the work-support upon the bed-plate, the latter may be provided with two upwardly projecting dowels 45 and the former with two holes to receive the said dowels. A thin strip 46 of soft brass or other suitable material may be inset in the top surface of the work-support 30 to receive the perforating edges of the tube die 20 to avoid injury thereto, and, if desired, the edge of the recess may be undercut and the longitudinal edges of the strip 46 may be bevelled to hold the latter within the former.

Between the work-support and the bed-plate a thin sheet of resilient material 47, such, for instance, as sheet rubber, may be interposed for taking up the final shock of the impact of the die upon the work-support. I have found that the use of such means diminishes the shock on the die and thereby greatly increases its life without at all lessening its perforating action. In fact, the interposition of a resilient material between the work-support and bed-plate permits of such adjustment of the movement of the die-carrying plunger that sharp and clean perforations are assured without noticeable wear upon the cutting edges of the die.

Pivotally mounted within the frame is a die-carrying plunger comprising a plunger-head 50 carried by two arms 51 connected together by a cross-piece 52, (see Figs. 2 and 9), all being preferably integral. Each arm 51 is pivotally mounted at its rear end upon a headed shaft 53 in a bearing 54 formed in one side 21 of the frame and held therein by the head of the shaft on the inner side and by a washer 55 and a screw 56 threaded into the end of the shaft on the outer side. The shafts 53 are so located that their centers lie in the same plane as the top surface of the work-support 30. The lower face 58 of the plunger head 50 is finished smooth to form an abutment surface for the perforating die and this face lies in a plane parallel to the plane of the work-support when the plunger is in a lowermost position.

The die comprises a plate 60 provided with a plurality of tube dies 61 of ordinary construction, set in the plate and arranged in a design and to permit the material cut out by the tube dies to pass up through the dies and the plate 60 and then to escape, the latter is provided with a series of lugs 62

adapted to engage the face 58 of the plunger head when the die is arranged in position and to hold the plate away from the plunger head. Any suitable means may be provided for holding the die in position on the plunger head and one such means is shown comprising two ears 63, one on each end of the plunger head; each ear being adapted to be forced toward the end of the plunger head by a butterfly-headed screw 64 threaded therethrough and into said end in order to contract a dowel hole 65 at the base of the ear to grip a dowel 66 formed on the back face of the die-plate 60. By the manipulation of the two screws 64, the die may be mounted on or removed from the plunger head without appreciable effect and in an inappreciable period of time.

For lowering and raising the plunger, I provide two toggle joints adapted to be straightened and broken by the operation of the main shaft of the machine. Each toggle joint is made up of a lower arm 68 and an upper arm 69, pivotally connected together by a shaft 70; the upper end of the lower arm 68 being preferably bifurcated to receive the lower end of the upper arm 69, and thereby prevent lateral motion during the operation of the machine. The two lower arms 68 at their lower ends are suitably formed to each receive one end 72 of a shaft 73 which is rotatably mounted in the upper part of the plunger head 50 and the upper arms 69 are similarly formed at their upper ends to each receive one end 74 of a shaft 75 rotatably mounted in two suitable bearings 76 integral with the frame of the machine. (See Fig. 8.) The arms 68 and 69 may be locked on their respective shafts 73 and 75 by any suitable means such as a washer 77 and screw 78 threaded into the end of the shaft in each case. The arms 68 and 69 may be re-enforced by webs 79.

The toggle joints may be operated from the main shaft 80 by any suitable means and one such is shown in the drawings consisting of two pitmen 81 each mounted on an eccentric 82 on the main shaft 80 and having its other end in the form of a split collar 83 adapted to encircle the inner end of one of the shafts 70, the junction of a toggle joint. The main shaft 80 is rotatably mounted in suitable bearings 84, each formed on the inner face of one of the sides 21 of the frame, and one end of said shaft extends beyond the frame and may be connected to any suitable source of power by a clutch not shown. Each perforating operation of the machine requires one complete revolution of the main shaft and consequently any form of clutch which permits an intermittent operation of this character may be used. Such a form of clutch is shown in a copending application for perforating machine filed by me in the United

States Patent Office on October 18, 1921, Serial No. 508,498, to which reference may be made for a more complete description of its construction and operation. This clutch there shown is adapted to be operated by a foot treadle and in this application the frame is shown provided with a lag 86 having a hole 87 to receive a rod connection between the clutch and treadle.

10 Preferably, the two eccentrics 82, together with a third eccentric 88, arranged midway, are formed in one piece, as shown in Figure 9, and bored to receive the main shaft 80. By making these three eccentrics in one integral piece and haying this piece upon the main shaft by means of keys 90 adapted to be inserted in keyholes 91 and through the shaft, all adjustments of the eccentrics in relation to each other are avoided and the true relation between them is always maintained. Each pitman 81 may be provided with an integral split strap 92, the ends of the strap being provided with lugs 93 threaded to receive a bolt 94 and nut 95 whereby the strap may be drawn into tight engagement with the eccentric as shown in Figure 2. The strap 92 is in each case of slightly less circumference on its inside face than the circumference of the eccentric which results in a gap between the two ends 96 of the strap, thereby permitting the strap to be tightened up to take up any wear. The pitman 81 may be re-enforced with longitudinal ribs 94.

35 As stated heretofore, the eccentrics 82 are are employed merely for straightening and breaking the toggle joints in order to lower and raise the plunger and are not of sufficient size to exert a perforating pressure upon the head of the plunger. In order to accomplish the final downward movement of the plunger head with force sufficient to perforate, I provide means for forcing both toggle joints as a unit in a downward direction during the downward movement of the plunger. This result may be accomplished by various means, one of which is the following. The two ends 74 of the shaft 75 are eccentric to the main body 75 of the shaft, so that the rotation of the shaft 75 raises and lowers the upper ends of the arms 69, thereby raising and lowering the toggle joints. To control this movement from the main shaft, the eccentric 88 is arranged on the main shaft, as heretofore explained, between the two eccentrics 82 and upon the eccentric 88 is mounted a pitman 100 having its free end in the form of a yoke 101 connected by a pin 102 to a split collar 103 fastened by a screw 104; said split collar being carried by a short arm 105 mounted on the shaft 75 between the bearings 76 and secured to said shaft by a key 106. The pitman 100 is held upon the eccentric by means of a split strap 108, this strap being split on

both sides and each portion of the strap being provided with lugs 110 on its two ends; said lugs being provided with threaded holes to receive bolts 112 and nuts 113 whereby the two portions of the strap may be fastened together around the eccentric 88. The loose portion of said strap is of such dimensions that when tightened on one side there remains a slight gap 114 on the other side to permit of the two portions of the strap being drawn together at that point to take up wear.

It is essential that the eccentric 88 be so positioned on the main shaft 80 in relation to the eccentric 82 that the arm 105 reaches the end of its movement to the right, referring to Fig. 2, at approximately the same time that the toggle joints reach the end of their movement to the left. At this point, illustrated in Fig. 2, the centers of the shaft 108, the main shaft 80 and the eccentric 88 lie in one straight line and the centers of the shaft 70, that is, the junction point of the toggle joints, the main shaft 80 and the eccentrics 82 all lie in another straight line. These two lines determine the relative location on the main shaft of the eccentrics 88 and 82, and since the arm 105 is shorter than the upper arms 69 of the toggle joints, and is eccentrically mounted with respect to the upper mounting of said arms 69, the two lines are at an angle to each other.

In order to secure a fine adjustment of the die with respect to the work-support at the time of perforating, means may be provided for adjusting the plunger head in relation to the toggle joints. The ends 72 of the shaft 73 upon which the lower ends of the lower arms 68 are mounted are arranged eccentrically with respect to the main body 73 of the shaft so that by turning the shaft 73 the plunger head may be moved within certain limits upwardly and downwardly in relation to the toggle joints. For this purpose a collar 120 may be secured by a pin 121 to the shaft 73 between the bearings 122 in the plunger head 50 and is provided with an arm 123 carrying a lug 124 provided with a chamber 125 within which is mounted a pin 126; the pin being maintained in an outward position by a spring 127. One of bearings 128 may be provided with a quadrant 129 adjacent to the lug 124 and may be provided with a series of holes 129 arranged in a quarter circle and adapted to be engaged by said pin 126 so that the shaft 73 may be rotated through a quarter circle to raise or lower the plunger head in relation to the toggle joints by pulling out the pin, then making the adjustments and allowing the pin to engage one of the holes in its adjusted position. This, it will be observed, permits the head of the plunger to be finely adjusted in relation to the toggle

joints, and thereby to secure a final perforating adjustment which will insure proper work without injuring the cutting edges of the die.

5 In Figures 12 and 13 of the drawings is shown two positions of the work-support 30 illustrating the method of reversing the die 60 and the work-support in the machine for the purpose of doing different kinds of work. In Figure 12 the work-support is shown in position for imitation perforating on a vamp in which the vamp is presented to the machine toe end foremost. This requires the use of a simple gauge 130 mounted on pins 131 adapted to engage corresponding holes 132 in the work-support. (See Fig. 14.) As the toe portion of the vamp 133 is inserted under the gauge, the latter is provided with washers 134 mounted on the pins under the gauge for the purpose of raising it from the top surface of the work-support in order to permit the toe portion of the vamp to be inserted between the gauge and work-support. It is customary in this work to mark the vamp 133 with pin points 135 and when the vamp is inserted in the machine these pin points are aligned against the lines 137 on the gauge. In Figure 13 is illustrated the method of using the machine for perforating tips 139. In this case the die and work-support are reversed from the position shown in Fig. 12, and a gauge 140 of different form is provided with pins 142 adapted to engage similar holes in the work-support. Additional holes 144 may be provided in order to move the gauge further away from the die where a wider margin between the perforations and the edge of the tip 139 is desired. The tip is presented to the machine by holding its edge 145 in engagement with the gauge 140 which rests upon the top surface of the work-support. It will be noticed that the dowel holes in the work-support are centered on a line 150 which just engages one side of the design so that the design in its entirety is located on one side or the other of this straight line. The dowels 62 in the die are positioned in the same manner. By arranging all designs in engagement with said line I am enabled to locate the holes for receiving the gauges absolutely so that both the die and work-support may be reversed in the machine to suit the various kinds of work without requiring anything further than a change in gauges.

The operation of my machine is as follows: The normal position of the machine is shown in Fig. 3 with the plunger in raised position. The operator sits in front of the machine where she has a full and complete view of the work-support, and places the work upon the said support in suitable relation to the gauge. She then depresses the treadle, throwing in the clutch and the main

shaft starts to revolve. The revolution of the main shaft turns the eccentrics 82 advancing the pitman 81 toward the front of the machine and straightening the toggle joints, which moves the plunger pivotally downwardly. At the same time the eccentric 88 moves the pitman 100 from front to rear, thereby gradually lowering the suspension point of the toggle joints and forcing them downwardly to move the plunger in the same direction. In Fig. 11, showing the operation of the machine diagrammatically, the dotted lines indicate the positions of the various parts while the machine is in a normal state of rest and before the power has been applied, and the solid lines indicate the final position of the parts at the completion of the perforating operation. At this latter point it will be observed that the eccentrics 82 are at the extreme of their forward movement and that the center of the joint of the toggle joints has passed beyond a straight line joining the centers of the ends 73 and 74 of the two shafts 73 and 75.

The continued rotation of the main shaft after the perforating operation has been completed then raises the plunger by breaking the toggle joints and at the same time raises the suspension point of said joints and the machine returns to its normal position after one complete revolution of the main shaft. The operator may operate the machine continuously by keeping the treadle depressed, or may operate the machine in a step-by-step manner, each step being one complete revolution of the main shaft, by merely depressing the treadle and then releasing it before the shaft has completed a revolution.

It will be noticed that at the extreme end of their forward movement the junction points of the toggle-joints pass beyond a straight line connecting the two centers of the two ends of each toggle-joint, this being shown in detail in Fig. 11. This result is due to the fact that the two arcs of movement of the upper end of the lower arm and the lower end of the upper arm of each toggle-joint while in theory touching at only one point, in practice coincide for an appreciable distance without effecting the height of the plunger in a vertical direction. The perforating pressure of the tube die is therefore exerted upon the material and the work-support throughout an arc of movement of the junction point of the toggle-joints of a number of degrees, thereby contributing to a clean cutting action of the tube die. By making the work-support resilient, the pressure of the tube dies upon the work-support in excess of the perforating pressure is taken up by the resiliency of the work-support without injuring the cutting edges of the die.

In order to change the machine from tips

to vamps, all that is necessary to do is to reverse the work-support upon the bed-plate and the die in the plunger head and place the proper gauge on the work-support.

5 This is an operation which requires little effort and can be accomplished in a very few moments. To change the machine from vamps to tips is an equally simple operation. By making my machine adapted to these two
10 kinds of work I accomplish in one machine what, up to the present time, has generally required two machines, or two dies if one machine is used.

It is to be understood that my invention
15 may be embodied in other forms of construction than that herein shown and described, and my invention is not to be limited to any specific form of construction.

What I claim is:—

20 1. A perforating machine having, in combination, a work-support, a plunger pivotally mounted on a fixed axis, a tube die carried by said plunger, a pair of toggle joints connected to said plunger and means for oper-
25 ating said toggle joints to lower and raise said plunger to perforate the material upon the work-support.

2. In a perforating machine, the combination of a pivotally mounted, die-carrying
30 plunger, adapted to move in the arc of a circle and normally held in a raised position permitting a full view of the work, and toggle-jointed means for operating said plunger.

3. In a perforating machine, the combination of a work-support, a die-carrying
35 plunger pivotally mounted at its rear end, adapted to move in the arc of a circle and normally in a raised position, permitting a full view of the work on said support, perforating means carried by said plunger, and
40 toggle-jointed means for operating said plunger to perforate the material upon said work-support.

4. A perforating machine having, in combination, a work-support, a die, die-holding
45 means, said means being normally in a raised position permitting the operator to have a full view of the work upon said work-support, means for operating said die-holding
50 means to perforate the work and means for lowering said operating means in order to impart the final perforating pressure.

5. A perforating machine having, in combination, a work-support, a die, die-holding
55 means, said means being normally in a raised position permitting the operator to have a full view of the work upon said work-support toggle-jointed means for oper-
60 ating said die-holding means to perforate the work and means for lowering said operating means in order to impart the final perforating pressure.

6. A perforating machine having, in combination, a work-support, a die, die-

holding means pivotally mounted on a fixed axis, said means being normally in a raised position permitting the operator to have a full view of the work
70 upon said work-support and toggle-jointed means for operating said die-holding means to perforate the work.

7. A perforating machine having, in combination, a work-support, a plunger pivotally mounted and normally in a raised position permitting a full view of the work
75 upon said work-support, a perforating die carried by said plunger, a pair of toggle joints for supporting the free end of said plunger, means for straightening and breaking
80 said joints to lower and raise said plunger and means for forcing said toggle joints downwardly during the straightening movement thereof in order to secure a heavy pressure at the conclusion of the perforating
85 operation.

8. A perforating machine having, in combination, a work-support, a plunger pivotally mounted and normally in a raised position permitting a full view of the work upon
90 said work-support, a perforating die carried by said plunger, a pair of toggle joints connected at the lower ends to said plunger and having their upper ends eccentrically
95 mounted on a rock-shaft, means for operating said toggle joints to lower and raise said plunger and means for rocking said rock-shaft to lower said toggle joints during the downward movement of the plunger.

9. A perforating machine having, in combination, a work-support, a plunger, a perforating die carried by said plunger, a pair
100 of toggle joints for lowering and raising said plunger and means for lowering said toggle joints during the downward movement of the plunger in order to increase the
105 length of its downward stroke.

10. A perforating machine having, in combination, a work-support, a plunger, a perforating die carried by said plunger, a
110 rock-shaft, a pair of toggle joints connected at their upper ends to said rock-shaft and at their lower ends to said plunger means for straightening and breaking said toggle joints to lower and raise said plunger and
115 means for turning said rock-shaft to drop said toggle joints to increase the length of the downward stroke of said plunger.

11. A perforating machine having, in combination, a work-support, a plunger, a
120 perforating die carried by said plunger, a rock-shaft, a pair of toggle joints connected at their upper ends eccentrically to said rock-shaft and at their lower ends to said
125 plunger, means for straightening and breaking said toggle joints to lower and raise said plunger and means for rocking said rock-shaft in order to lower said toggle joints during the downward movement of the plunger.

12. A perforating machine having, in combination, a work-support, a pivoted plunger, a perforating die carried by said plunger, a pair of toggle joints for lowering and raising said plunger, the lower ends of said toggle joints being eccentrically connected to said plunger to permit of relative adjustment of said plunger in relation to said toggle joints and means for operating said toggle joints to lower and raise said plunger.

13. A perforating machine having, in combination, a work-support, a pivoted plunger, a perforating die carried by said plunger, a pair of toggle joints for lowering and raising said plunger, the lower ends of said toggle joints being connected eccentrically to said plunger to permit of adjustment of the plunger in relation to the toggle joints, means for locking said plunger in its adjusted position with relation to said toggle joints and means for operating said toggle joints to lower and raise said plunger.

14. A perforating machine having, in combination, a work-support, a plunger pivotally mounted, a perforating die carried by said plunger, a rock-shaft, a pair of toggle joints connected eccentrically at their upper ends to said rock-shaft and eccentrically at their lower ends to said plunger, means for straightening and breaking said toggle joints to lower and raise said plunger and means for rocking said rock-shaft to lower said toggle joints during the downward movement of said plunger in order to lengthen the effective stroke of said plunger and to exert a perforating pressure thereon.

15. A perforating machine having, in combination, a work-support, a main shaft, a plunger pivoted on a fixed axis, a perforating die carried by said plunger, a pair of toggle joints for operating said plunger, eccentric means mounted on said main shaft for straightening and breaking said toggle joints to lower and raise said plunger.

16. A perforating machine having, in combination, a main shaft, a work-support, a pivoted plunger, a perforating die carried by said plunger, a rock-shaft, a pair of toggle joints connected eccentrically at their upper ends to said rock-shaft and at their lower ends to said plunger, means mounted eccentrically on said main shaft for operating said toggle joints to lower and raise said plunger and means mounted eccentrically on said main shaft for rocking said rock-shaft to lower said toggle joints during the downward movement of said plunger in order to extend the length of the effective stroke of the plunger and to exert the pressure necessary for the perforating operation.

17. In a perforating machine, the combination with a work-support and a perforating member of toggle-jointed means for

operating said perforating member, and rotatable means for adjusting the relation between said member and said means.

18. In a perforating machine, the combination with a work-support, and a perforating member of toggle-jointed means for operating said perforating member and means for adjusting the relation between said member and said toggle-jointed means; said means comprising a shaft rotatably mounted in said perforating member, said shaft having eccentric ends adapted to receive said toggle-jointed means, and means for turning said shaft in either direction.

19. In a perforating machine, the combination with a work-support, a pivoted plunger and means for operating the said plunger of a perforating tube die provided with two dowels adapted to fit and to be secured in suitable holes in the plunger; the tubes on said die being all located on one side of a straight line drawn through the centers of said two dowels in order that the said die may be reversibly mounted on the plunger when desired.

20. In a perforating machine, the combination with a work-support, a pivoted plunger and means for operating the said plunger of a perforating tube die provided with two dowels adapted to fit and to be secured in suitable holes in the plunger; the tubes on said die being arranged to perforate a design which abuts a straight line drawn through the centers of said two dowels and lies entirely on one side of said line in order that the said die may be reversibly mounted on said plunger.

21. In a perforating machine, the combination with a work-support, a plunger and means for operating the said plunger of a perforating tube die provided with two dowels adapted to fit and to be secured in suitable holes in the plunger; the tubes on said die being all located on one side of a straight line drawn through the centers of said two dowels in order that the said die may be reversibly mounted on the plunger when desired.

22. In a perforating machine, the combination with a work-support and a perforating member of toggle-jointed means for operating said perforating member and means operating in a downward direction for applying the final perforating pressure on said perforating member.

23. In a perforating machine, the combination with a work-support and a perforating member of toggle-jointed means for operating said perforating member and rotatable means for adjusting the relation between said perforating member and said toggle-jointed means.

24. In a perforating machine, the combination with a work-support and a perforating member pivotally mounted of

means for operating said perforating member, said means being adjustable in relation to said member.

25. In a perforating machine, the combination with a work-support and a perforating member of operating means therefor; said operating means being eccentrically connected to said perforating member for permitting adjustment of said member in relation to said operating means.

26. In a perforating machine, the combination of a frame, a work-support, a die-carrying member, a rock-shaft mounted in suitable bearings in the top of said frame and having eccentric ends, a pair of toggle joints mounted at their upper ends on said eccentric ends of said rock-shaft and at their lower ends connected to said die-carrying member, means for operating said toggle-joints to lower and raise said member, and means for turning said rock-shaft to lower said toggle joints at the end of the downward stroke of said member.

27. In a perforating machine, the combination of a frame, a work-support, a die-carrying member pivotally mounted and normally in a raised position, a rotatable member mounted in the upper part of said frame, a pair of toggle joints eccentrically mounted at their upper end on said rotatable member and at their lower ends adjustably secured to said die-carrying member, means for operating said toggle joints to lower and raise said die-carrying member, and means for turning said rotatable member to lower said toggle joints during their downward movement.

28. In a perforating machine, the combination of a frame, a work-support, a die-carrying member normally in a raised position, a rotatable member in the top of said frame, toggle-jointed means eccentrically mounted at its upper end on said rotatable member and adjustably secured at its lower end to said member, means for operating said toggle-jointed means, and means for turning said rotatable member to change the position of said toggle-jointed means.

29. A perforating machine having, in combination, a main shaft, a die-carrying member, toggle-jointed means connected to said member, eccentric means mounted on said main shaft for operating said toggle-jointed means to lower and raise said member, and means for lowering said toggle-jointed means during the downward movement of said die-carrying member including eccentric means on the said main shaft; said first mentioned eccentric means and said second mentioned eccentric means being so mounted on said main shaft as to balance each other.

30. In a perforating machine, the combination with a pivotally mounted die-carrying plunger of operating instrumentalities

therefor comprising a pair of toggle-joints, a main shaft and two pitmen eccentrically mounted on said shaft and each connected to one of said joints.

31. In a perforating machine, the combination with a pivotally mounted die-carrying plunger of operating instrumentalities therefor comprising a main shaft, two eccentrics formed thereon, two toggle-joints, two pitmen, each mounted on one of said eccentrics and connected at its free end to one of said toggle-joints, whereby said joints are straightened and broken on the revolution of said shaft.

32. In a perforating machine, the combination of a die-carrying plunger pivotally mounted on a fixed axis and toggle-jointed means for operating said plunger.

33. In a perforating machine, the combination of a frame, a die-carrying plunger pivotally mounted at two points in said frame, a rock-shaft mounted in suitable bearings in the top of said frame, a pair of toggle-joints mounted at their upper ends eccentrically on said rock-shaft and at their lower ends connected to said plunger, means for rocking said rock-shaft and means for operating said toggle-joints to lower and raise said plunger.

34. In a perforating machine, the combination of a frame, a bed plate, means for levelling said bedplate, a work-support on said bedplate, a die-carrying plunger pivotally mounted on a fixed axis, and means for operating said plunger.

35. In a perforating machine, the combination of a frame provided with two opposite curved flanges, a bedplate mounted on said flanges, the ends of said bedplate being curved to correspond to the curve of said flanges, means for adjusting said bedplate on said flanges in a transverse direction, a work-support on said bedplate, a die-carrying plunger, and means for operating said plunger.

36. In a perforating machine, the combination of a frame having two oppositely arranged flanges, the upper longitudinal faces of said flanges being cut on a circle, a bedplate mounted on said flanges, its two ends being curved transversely to correspond to the longitudinal curve of said flanges, adjusting screws for levelling said bedplate transversely, dowels set in said bedplate, a work-support mounted on said dowels and in engagement with said bedplate, a die-carrying plunger, and means for operating said plunger.

37. In a perforating machine, the combination of a die-carrying plunger, means for operating said plunger, and an adjustable connection between said plunger and said operating means; said connection comprising a rotatable member mounted on said plunger and having an eccentric portion to

which said operating means is connected, and means for rotating said rotatable member to adjust the relation between said plunger and said operating means.

5 38. In a perforating machine, the combination of a die-carrying plunger, means for operating said plunger, and an adjustable connection between said plunger and said operating means; said connection com-

prising a shaft rotatably mounted on said 10 plunger and having eccentric portions adapted to be connected to said operating means, and means for turning said shaft to adjust the relation between said plunger and said operating means. 15

In witness whereof, I hereunto set my hand this second day of November, 1921.

WILLIAM F. LAUTENSCHLAGER.

Part of Defendants' Exhibit K.

**(Letters Patent No. 1,439,019 to C. W. Newton,
December 19, 1922.)**

748 Dec. 19, 1922.

C. W. NEWTON.
VAMP PERFORATING MACHINE.
FILED SEPT. 23, 1920.

1,439,019.

5 SHEETS—SHEET 1.

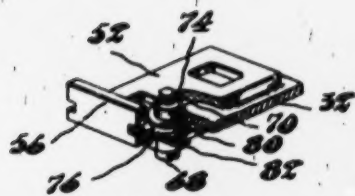


Fig. 4.

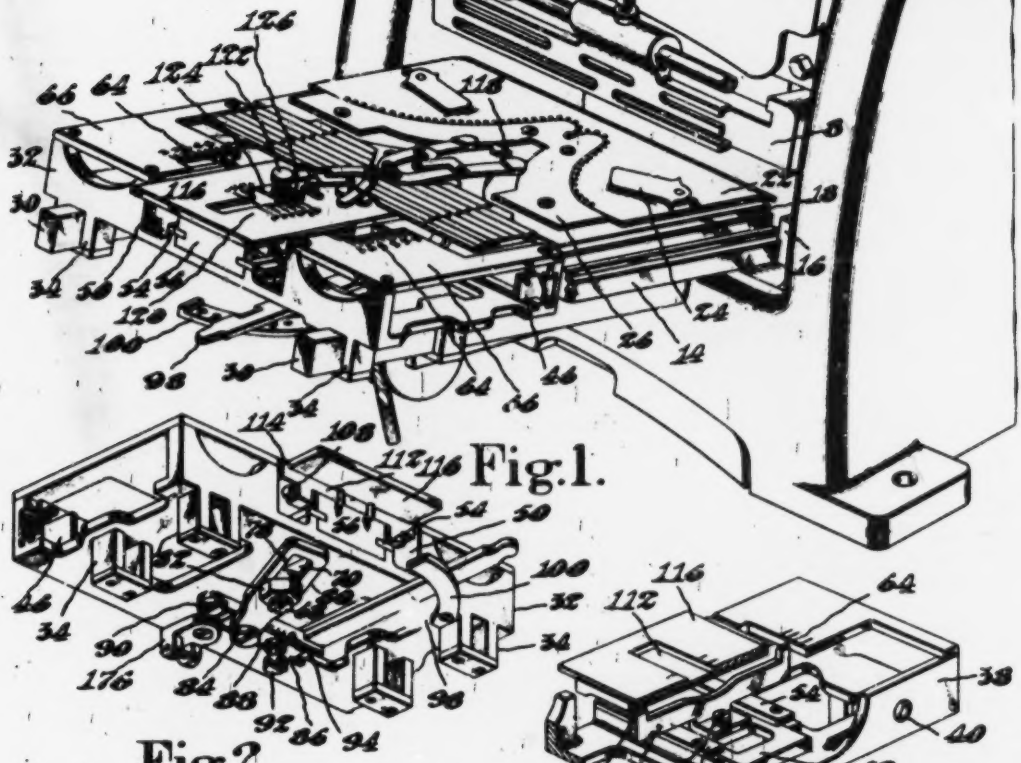


Fig. 1.

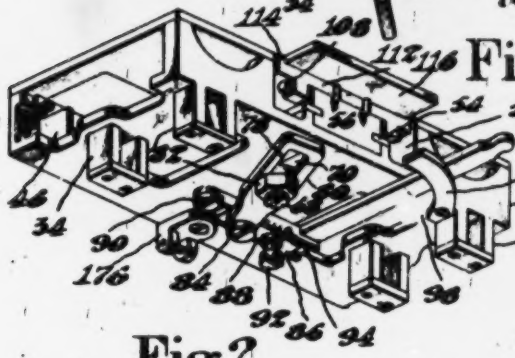


Fig. 2.

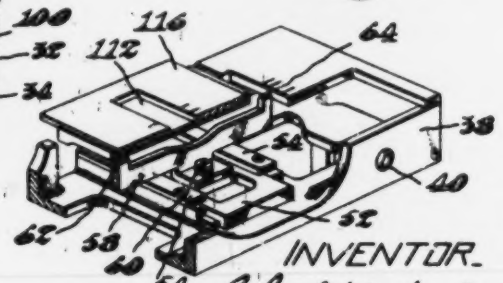


Fig. 3.

INVENTOR.

Charles W. Newton

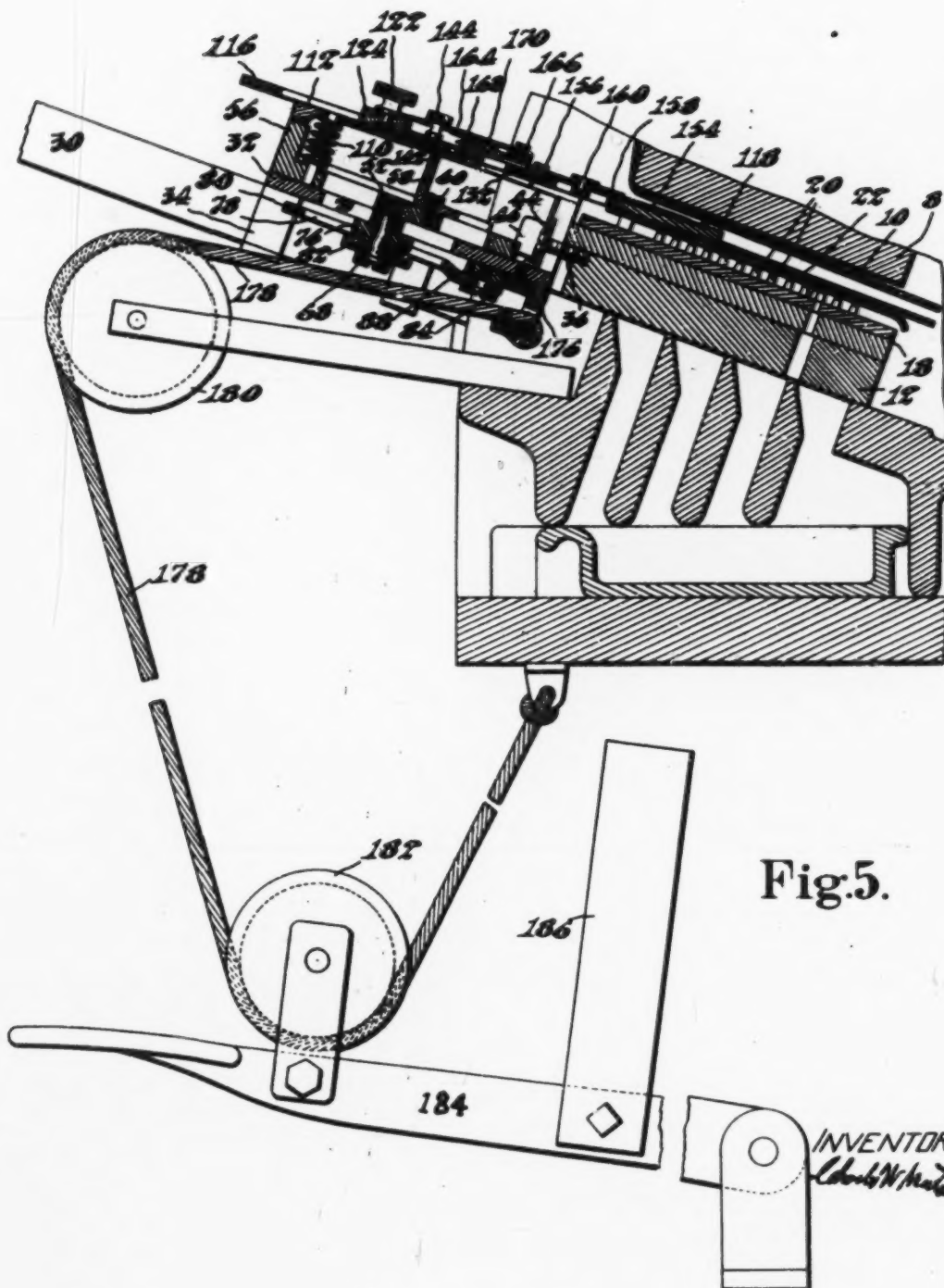
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C. W. NEWTON.
VAMP PERFORATING MACHINE.
FILED SEPT. 23, 1920.

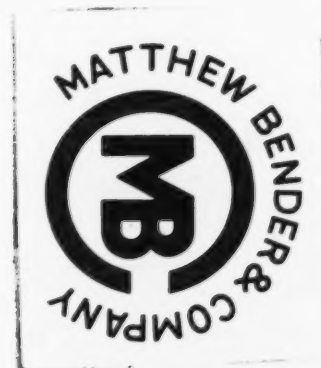
5 SHEETS—SHEET 2.



MICRO CARD 22

TRADE MARK **(R)**

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C. W. NEWTON.
VAMP PERFORATING MACHINE.
FILED SEPT. 23, 1920.

5 SHEETS—SHEET 3.

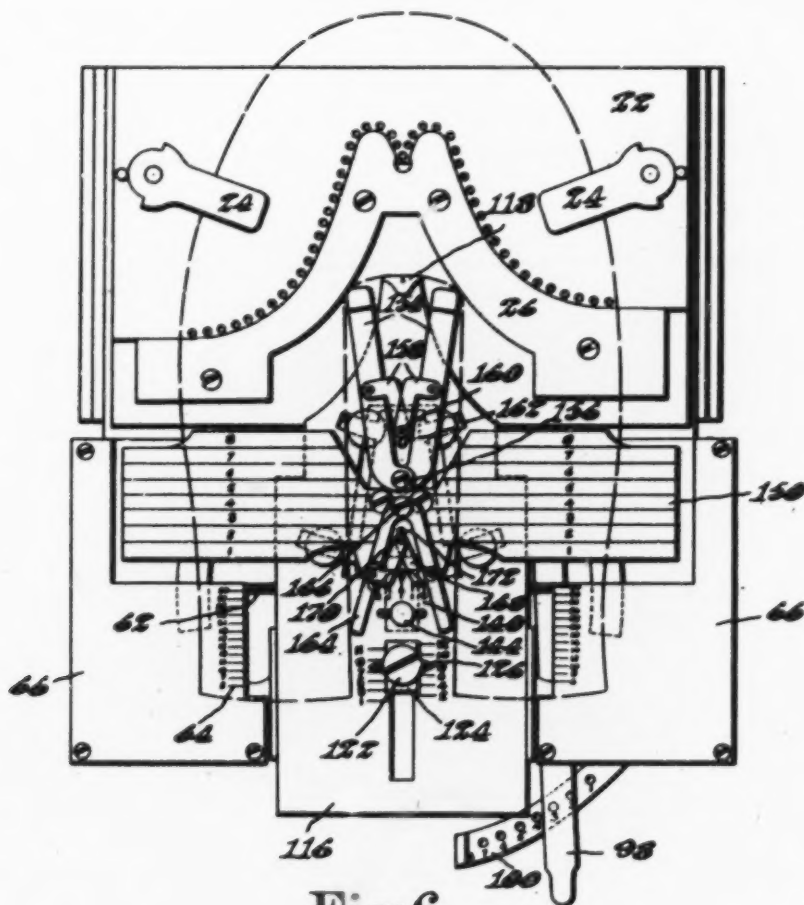


Fig. 6.

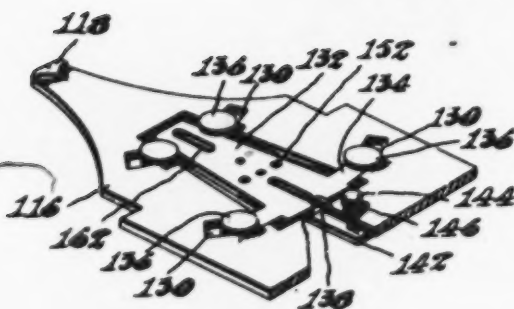


Fig. 7.

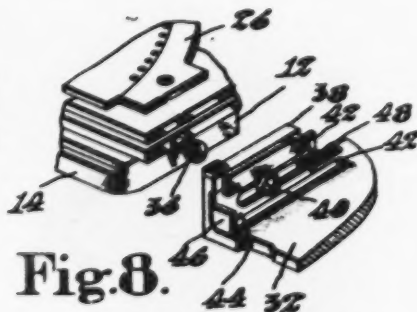


Fig. 8.

INVENTOR.

Charles W. Newton

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754 Dec. 19, 1922.

1,439,019.

C. W. NEWTON.
VAMP PERFORATING MACHINE.
FILED SEPT. 23, 1920.

3 SHEETS—SHEET 4.

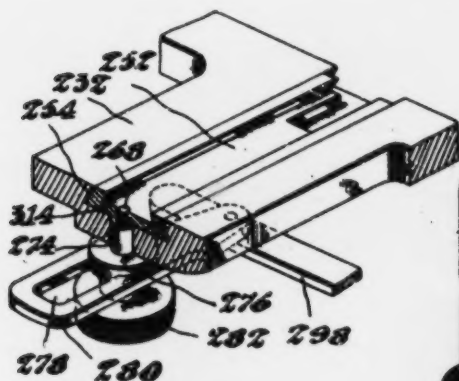


Fig. 11.

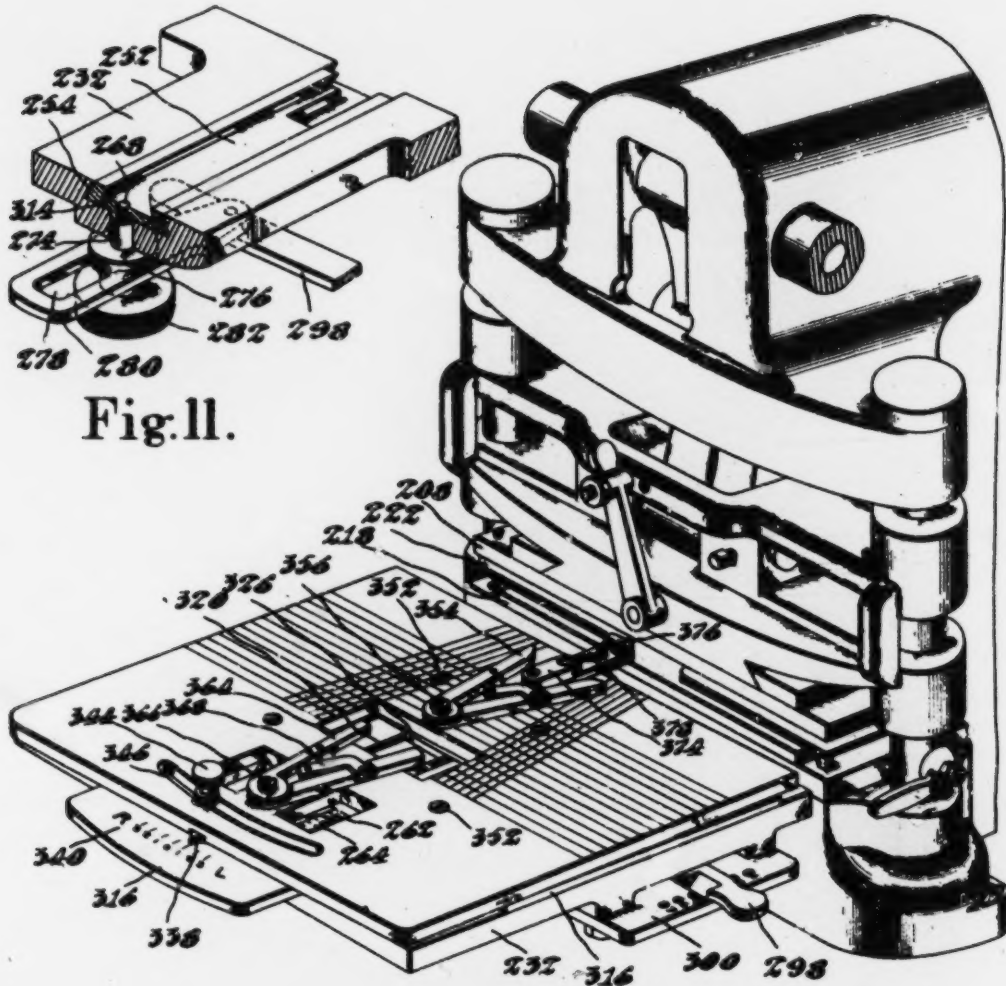


Fig. 9.

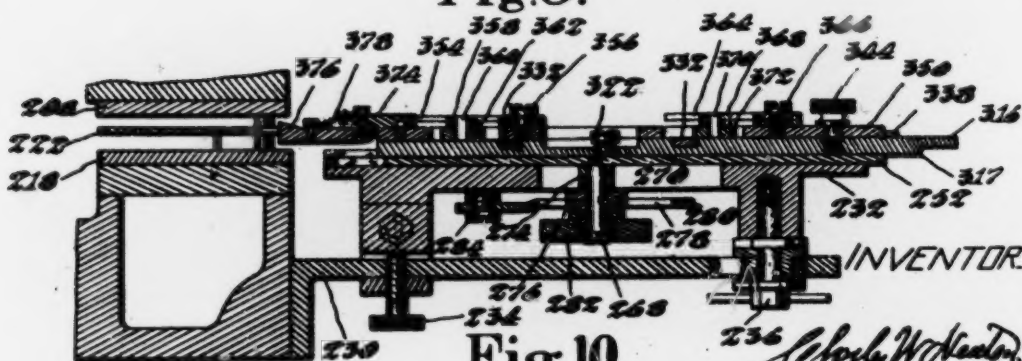


Fig. 10.

INVENTOR.

Charles W. Newton

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C. W. NEWTON.
VAMP PERFORATING MACHINE.
FILED SEPT. 23, 1920.

5 SHEETS—SHEET 5.

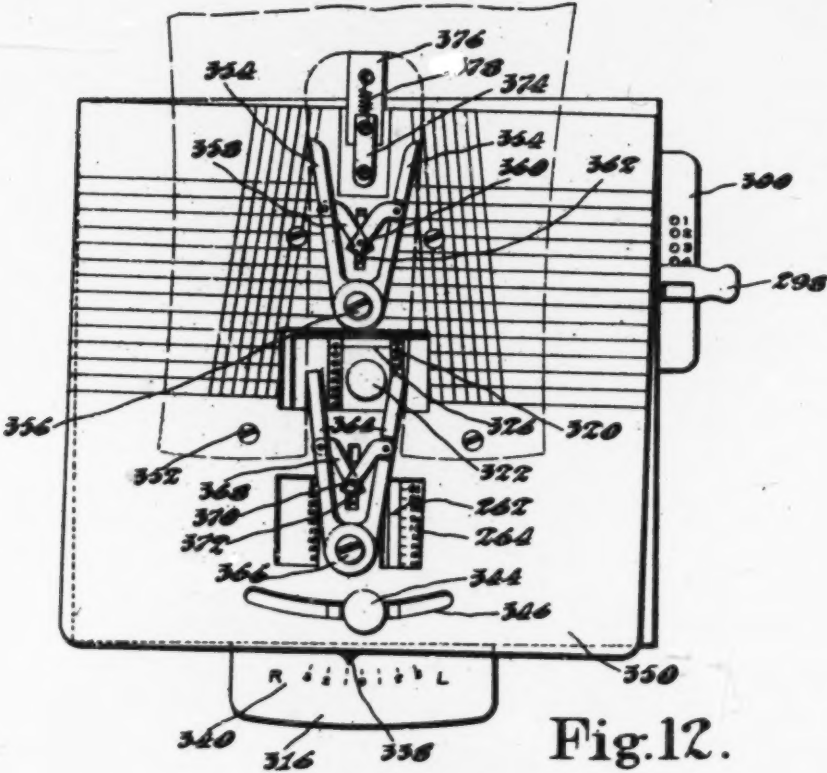


Fig. 12.

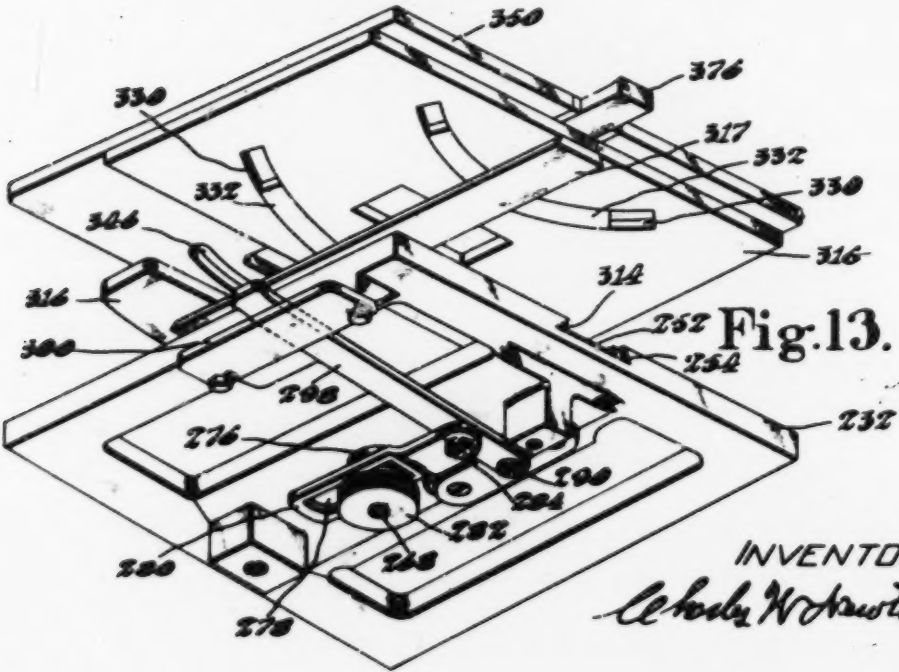


Fig. 13.

INVENTOR.
C. W. Newton

UNITED STATES PATENT OFFICE.

CHARLES W. NEWTON, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO UNITED SHOE MACHINERY CORPORATION, OF PATERSON, NEW JERSEY, A CORPORATION OF NEW JERSEY.

VAMP-PERFORATING MACHINE.

Application filed September 23, 1920. Serial No. 412,126.

To all whom it may concern:

Be it known that I, CHARLES W. NEWTON, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Vamp-Perforating Machines, of which the following description, in connection with the accompanying drawings, is a specification, like reference characters on the drawings indicating like parts in the several figures.

This invention relates to machines for operating on sheet material and is herein shown as embodied in a machine for perforating vamps.

In the manufacture of boots and shoes, it is usual to ornament certain parts of the upper by punching designs therein by means of a gang punch. When it is desired so to use a pattern punch to ornament some shoe parts, as the toe portion of a vamp on a wing tip, difficulty is encountered in presenting the work to the machine in the proper manner for the reason that the toe portions of vamps are not symmetrical, and their outlines differ according as they are rights or lefts and according to their sizes. Moreover, the longitudinal position of the design to be punched varies, its distance from the center of the throat of the vamp varying in different styles of shoes. Again, the pattern punches vary, the perforating tubes being located at different distances from the edges of the dies. Furthermore, when a vamp is to be provided with a line of perforations, or with an ornamental medalion, it is often desirable to "angle" the design, that is, to place that portion of the design on the outer side of the shoe slightly rearward of that portion on the inner side. On right and left shoes this displacement of the design is equal and in opposite directions.

An object of the invention, therefore, is to provide a satisfactory mechanism for positioning vamps to be perforated and so constructed that it may be effectively utilized to position vamps or wing tips of different styles with respect to various perforating or other ornamenting mechanism under the varying conditions existing in different factories and of such a nature that it will permit the operator to work at a maximum speed with a minimum possibility of error.

With this object in view, there is provided in the illustrated machines, in combination, a cutting block, a perforating die for ornamenting a vamp and a vamp support connected to the die and movable with respect to the cutting block to carry the vamp from a vamp positioning to a vamp perforating position. Features of the invention include also, means for adjusting the vamp angularly to position the ornamentation at an angle to the center line of the vamp and means for taking care of variations in the style of vamp or the die.

Although the term "vamp" has been used repeatedly throughout the specification and claims, that term has been used merely for convenience and is intended to cover, where the context and prior art permit, not only vamps, but wing tips or other parts of shoes to be ornamented. Although the invention has been illustrated as being in the nature of an attachment for existing machines, it should be understood that it is in no way limited in that respect.

Referring to the drawings:

Figure 1 is a perspective view of a perforating machine in combination with one form of vamp gage;

Fig. 2 is a perspective view of the under side of the vamp carrier;

Fig. 3 is a perspective view, partly in section of the vamp carrier;

Fig. 4 is a perspective view partly in section of a detail;

Fig. 5 is a vertical, central section of the perforating machine showing the vamp carrier, die and vamp in a punching position;

Fig. 6 is a top plan view of the die, gage and vamp carrier;

Fig. 7 is a perspective view of a detail;

Fig. 8 is a perspective view of the detachable connection between the die and vamp carrier;

Fig. 9 is a perspective view of a modified form of perforating machine together with a modified form of gage;

Fig. 10 is a vertical, central section thereof;

Fig. 11 is a perspective view partly in section of a detail;

Fig. 12 is a top plan view of the vamp gage of Fig. 9 and its support; and

Fig. 13 is a perspective view of the gage support, the parts being separated.

In the embodiment shown in Figs. 1 to 8, the punch and vamp gage are secured together for joint sliding movement toward and from the die block. At 8 is indicated the usual cutting block or bed over which is fed the paper backing strip 10 and, below these, is the die holder 12 having projecting ledges 14, at the sides to engage and slide along the ways 16 on the frame of the machine. On the die holder 12 is a two-part punch plate 18 in which are secured hollow punches 20 which are arranged in the desired design of ornamentation. There is mounted on the punch plate 18 a perforated stripper plate 22 carrying turn buttons 24 for holding the work. In place of the usual edge gage which projects above the stripper plate I have provided a filler plate 26 which is yieldingly mounted and comes flush with the top face of the stripper plate. The die or punch is inserted beneath the die block, with its "toe" end towards the rear, this being the reverse of the usual arrangement.

In the form of the invention shown particularly in Fig. 1, the vamp is first placed in the desired position on a carrier while it is free and clear of the cutting block. The vamp carrier and the die are secured together, and, when the vamp is positioned, all these members are moved rearwardly to a punching position. For this purpose, there is bolted to the frame of the machine, a pair of inclined guide bars 30, on which slides a skeleton slide block 32 which, with the attached parts, constitutes the vamp carrier. Suitable guide lugs 34 projecting downwardly from the slide block 32 direct its movement toward the punch. As the style of die or punch is frequently changed, it is desirable to have the die detachably connected to the vamp carrier and gage. As shown in Fig. 8, this detachable connection consists of headed screws 36 projecting from the die holder 12 and adapted to enter apertures 40 formed in lugs 38 on the rear of the slide block 32. To lock these parts in position, there are provided lock plates 44 slidably mounted in guides 42 on the block and having finger pieces 46 by which they may be moved. Each lock plate 44 is provided with an aperture of the size of the aperture 40 and also with a narrow slot, so that upon sliding the plate, it will engage behind the head of the screw 36 to secure the die and vamp carrier together. A stop 48 may be used to indicate when the apertures are in registration.

In the various styles of dies the punches are frequently fixed at different distances from the edges of the dies. It is therefore desirable to have an initial adjustment of the die with reference to the vamp support and gage. For this reason the slide block 32 is provided with a cut out portion

50, and, moving in ways 54 of the slide block, and in the cut out portion, is a slide member 52 carrying the vamp support and gage. The slide member has a vertical flange 56 at its front end (Fig. 4), this flange having slots for guided movement along the ways 54. Attached to an intermediate portion of the slide member 52 by means of a screw 60, (see Figs. 3 and 5) is a bar 58 forked at its ends and having pointers or indices 62 for co-operation with scales 64 on the face plates 66 of the block. These scales 64 are graduated in accordance with a characteristic of the die and are marked by numbers which may be placed along the scales, these numbers corresponding to similar numbers which may be stamped on the different dies.

For securing the slide member 52 to an operating means after the initial adjustment has been made, there is provided a pivot screw 68, which is threaded upwardly into the member 52, and a bushing, consisting of a reduced portion 74 which slides in a slot 70 of the block 32 and of an enlarged shouldered portion 76, to which is clamped a link 80. This link is slotted, as indicated at 78, and a clamp nut 82, threaded on the bushing, secures the link to the slide member 52. The bushing is loosely swiveled on the pivot screw 68 so that there is provision for swinging movement of the link. The link is connected at its other end to an operating lever through the following grade adjusting connections. At the end of the link is a pivot 84 secured to an adjustable block 86 mounted to slide in a groove of the arm 88 pivoted at 90 to the slide block. The block 86 has an indicator or pointer 94 for co-operation with a scale on the arm 88 and a clamp screw 92 holds the block in adjusted position. This last adjustment is to provide for the varying of the "grade" as it is called and it is not necessarily used since the size variations are quite generally standardized. If a different system of size measurement is used, however, the placing of the pivot 84 nearer to or farther from the pivot 90 will alter the throw of the link and the vamp gage to which it is connected. After the preliminary adjustments have been made, the vamps are progressively positioned and punched throughout the series of sizes, as described hereinafter, the lever 96 being moved over a sector-shape member having a scale 100 with size indications thereon.

Since to permit the normal functioning of the stripper plate, the work and its supporting means must "give" a little, the gage plate 116 which carries the vamp positioning means, is mounted to have pivotal movement about the pivot screws 108 (Fig. 2). These screws 108 are carried by a member 112 having interposed between it and the

slide member 52 a spring 110. The gage plate 116 is mounted for sliding movement in ways 114 carried by the member 112 and has, at its front end, a lug 118 for locating the throat of the vamp and, at its other end, a slot, on the sides of which are graduated scales 120. A suitable clamping block 124, having pointers 126 for co-operation with these scales, is slidably mounted in the slot and has a clamping screw 122 threaded in the member 112 to hold the gage plate 116 in adjusted position. This adjustment is provided to take care of the differences in the styles of vamps, as for instance, where there is a variation in the distance of the perforations from the throat of the vamp.

In punching the vamp, it is often desirable to angle the perforations with respect to the vamp center line. For this purpose, the gage plate 116 has a series of arc shaped guide slots or ways 130 (see Fig. 7), in which is mounted a guide plate 132 having arcuate guide projections 134. The slots and projections are curved about a center at the lug 118 so that the vamp will be moved angularly about its throat as a center. Guide washers 136 may be secured to the projections to prevent the escape of the guide plate. To indicate the extent of the angular movement, there is attached to the guide plate, a pointer 138 for co-operation with a scale 140 on the gage plate. To effect this angular adjustment, an extension 142 of the guide plate may be swung to the right or left by a clamp screw 144 passing through an arc shaped slot 146 in the gage plate. For supporting the vamp as it turns through this angle there is attached to the guide plate at 152 by means of screws a vamp supporting plate 150. This plate 150 may have parallel numbered lines to aid in positioning a so-called circular or short vamp if such work is to be punched. Secured to the guide plate 132 is a rear set of V-arms or gage members 154 mounted to swing about the pivot 156. These arms are constrained to move equally with reference to the vamp center line by means of links 158 pivoted at one end to the arms and being pivoted at their opposite ends to a pin 160 sliding in a slot 162 on the guide plate. Attached by means of the pivot 166 to the vamp supporting plate 150 is a forward set of V-arms or gage members 164. These arms are connected pivotally to links 168 which, in turn, are secured to a pin 170 sliding in a slot 172 in the plate 150.

To render easy the movement of the die and vamp carrier from the position shown in Fig. 5 to that shown in Fig. 1 there is secured to these members a counter weight device. This consists of a bracket 176 secured to the block 82 and a cable 178 passing around a fixed pulley 180 and a mov-

able pulley 182 and secured to the frame of the machine. The movable pulley 182 is carried on a treadle 184 having a weight 186 which approximately balances the weight of the vamp carrier and die.

In operation, the desired die is first selected and secured to the carrier by the connection shown in Fig. 8. The parts are then placed in the position shown in Figs. 1 and 6 and the vamp positioned around the gage arms with its throat against the lug 118. The initial adjustment to compensate for the style of die is made by loosening the nut 82 and moving the slide member 52 until the indicator 62 comes opposite the desired number on the scale 64. This number is obtained either from the die or from a die schedule with which the operator is furnished. The nut 82 is then tightened to clamp the slide member 52 to its operating means. The initial adjustment to compensate for the style of vamp is made by loosening the clamp screw 122 and moving the gage plate 116 in the ways 114 until the pointer on the block 124 is opposite the desired number on the scale 120. This number is obtained from the work ticket and determines the distance of the perforations from the throat of the vamp. The clamp screw 122 is then tightened to secure the gage plate to the member 112 and slide member 52.

To center the vamp, the gage arms 154 and 164 are spread apart until both sets meet the side edges of the vamp throat and this movement may slide the vamp sideways somewhat on the supporting plate 150 until the vamp is centered. If it is desired to "angle" the vamp, the screw 144 is loosened and the guide plate 132, supporting plate 150 and gage arms are swung to the right or left on the gage plate 116 until the desired position is indicated by the scale 140 and pointer 138. The screw 144 is then tightened and the lever 98 moved along the size scale 100 to the number corresponding to the size of the vamp. The connected die and vamp carrier are then slid down the guide bars 30 as far as they will go whereupon the cutting block 8 is caused to descend to perforate the work. When the die and carrier are again moved forwardly, the vamp of the next size is selected and positioned, the only correction thereafter necessary for the progressive punching of the vamps being the swinging of the lever 98 along its scale in accordance with the size.

In Figs. 9 to 13 inclusive, I have shown another form of perforating machine and a modified form of vamp gage. The perforating die is not mounted to slide as in the other form. In these figures I have indicated parts corresponding to those in the other form of my invention by means of reference numerals having an additional 200.

In this machine there is provided a cutting block 208 for co-operation with a punch plate 218 and a stripper plate 222. Attached to a bracket 230 on the frame is a block 232 secured in place by means of suitable clamp screws 234 and 236. Mounted adjustably in ways 254 in the block 232 is a slide member 252, the position of this slide member being indicated by a scale 264 on the block 232. This scale co-operates with an index 262 on the slide member and the adjustment is to provide for the style of die. After this adjustment has been effected the slide member 252 is connected to an operating means in a manner similar to that described in the other form. Secured to the slide member 252 is a pivot screw 268 movable in a slot 270 on the block 232. Around this pivot is swiveled a bushing comprising a portion 274 reduced to slide in the slot 270 and an enlarged shouldered portion 276 for clamping engagement with a slot 278 in a link 280. The link is pivotally connected at 284 with an operating lever 298 which, in turn, is pivoted to the block 232 at 290. A scale 300, graduated in vamp sizes, is arranged for co-operation with the lever 298.

Mounted in ways 314 in the slide member 252 is a gage plate 316 from which extends a dove-tailed slide tongue 317. The sliding movement is provided to give an adjustment in accordance with the style of vamp and the adjustment is indicated preferably by means of an index 326 on the tongue 317 and a scale 320 on the sides of the slide member 252. The scale and index may be reversed, if desired and the parts may be secured together by a clamp screw 322 threaded in the gage plate 316 and abutting the member 252.

For "angling" the vamp to the right and left to place the ornamentation at an angle to the center line, the following mechanism is utilized: The gage plate 316 has arcuate guide slots 330 in which are mounted arcuate guide plates 332 secured by the screws 352 to a vamp supporting plate 350. The amount of angular movement is indicated by means of a pointer 338 on the supporting plate co-operating with a scale 340 on the gage plate 316. The supporting plate 350 may be clamped in adjusted position by means of a clamp screw 344 threaded in the gage plate 316 and passing through an arc-shaped slot 346 in the supporting plate.

For engaging the side edges of the throat of the vamp to center the latter on the supporting plate, there are provided front and rear sets of gage arms. The rear set comprises arms 354 pivoted at 356 and constrained to move together by means of the links 358. These links are pivoted at their meeting ends to a slide block 362 mounted to move in a slot in the supporting plate. A similar set of front gage arms 364 are

pivoted at 366 and connected together by means of links 368 pivoted at 370 to a block 372 sliding in a slot in the supporting plate.

To position the throat of the vamp, there is secured to the plate 350 a bracket 374 to which is pivoted a member 376, this member being held normally in a slightly raised position above the stripper 222 by means of a spring 378. This spring allows the member to yield under punching pressure.

In the operation of this modified form, the preliminary adjustments to compensate for the different styles of dies and for the different styles of vamps are made in a manner similar to that described with reference to Figs. 1 to 8. The vamp is centered on its supporting plate 350 by means of the throat engaging member and the gage arms. If the vamp is to be "angled," the clamp screw is loosened and the supporting plate swung to the right or left to the desired extent indicated by the scale 340. The toe portion of the vamp then projects rearwardly the proper distance between the die and cutting block to receive the perforations. The progressive punching of the vamps is then continued throughout the series of sizes, by successive adjustments of the lever 298 over the size scale 300.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:—

1. The combination with a perforating machine having a cutting block, of vamp positioning means mounted to slide with reference to the cutting block, a perforating die, and means to adjust the positioning means angularly to position the perforations at an angle with respect to the center line of the vamp.

2. The combination with a vamp perforating machine having a cutting block and a perforating die for ornamenting the vamp, of vamp positioning means, and means to adjust the positioning means angularly to place the perforations at an angle to the center line of the vamp.

3. The combination with a perforating machine having a cutting block, of a gage plate mounted to slide with reference to the cutting block, vamp positioning means movably mounted on the gage plate, a perforating die, and means to adjust the positioning means angularly to place the perforations at an angle to the center line of the vamp.

4. The combination with a perforating machine having a cutting block, of a perforating die, a gage plate mounted to slide with reference to the cutting block, a guide plate mounted to move angularly with respect to the gage plate, vamp gage arms pivotally carried by the guide plate, and means to adjust the guide plate angularly to place the perforations at an angle to the center line of the vamp.

5. The combination with a perforating machine having a cutting block, of a perforating die, a gage plate mounted to slide with reference to the cutting block and having a vamp throat engaging member, a guide plate mounted to move angularly about the throat engaging member, vamp gage arms carried by the guide plate, and means to adjust the guide plate and gage arms angularly to place the perforations at an angle to the center line of the vamp.

6. In a perforating machine, in combination, a cutting block, vamp positioning means, a gang punch for ornamenting the vamp, and means for swinging the vamp positioning means with respect to the gang punch to position the perforations at an angle to the center line of the vamp.

7. In a vamp perforating machine having a cutting block and a perforating die, a supporting plate for supporting the vamp, and means to adjust the supporting plate angularly to position the perforations at an angle to the center line of the vamp.

8. In a vamp perforating machine having a cutting block and a perforating die, a movable plate for supporting the vamp, gage arms mounted to move with the supporting plate, and means to adjust the supporting plate angularly to place the perforations at an angle with respect to the center line of the vamp.

9. In a vamp perforating machine having a cutting and a perforating die, a movable plate for supporting the vamp, pairs of gage arms pivoted with respect to the supporting plate, and means to adjust the supporting plate and gage arms angularly to set the perforations at an angle to the center line of the vamp.

10. In a vamp perforating machine, in combination, a cutting block, a gang punch for ornamenting the vamp, a gage plate having a member to engage the throat of the vamp, and vamp gage arms mounted to move angularly about the throat engaging member.

11. In a vamp perforating machine, in combination, a cutting block, a gang punch for ornamenting the vamp, a gage plate having a member to engage the throat of the vamp, a vamp supporting plate mounted to move angularly about the throat engaging member, and gage arms mounted to move with the supporting plate.

12. In a vamp perforating machine, in combination, a cutting block, a gang punch for ornamenting the vamp, a gage plate having arcuate guideways, a guide plate mounted to move in the guideways angularly about the throat of the vamp, and gage arms mounted to swing angularly with the guide plate.

13. The combination with a perforating machine having a movable cutting block, a

guide, vamp positioning means mounted to slide on the guide, a perforating die, and means to adjust relatively the positioning means and the perforating die to set the perforations at an angle to the center line of the vamp.

14. The combination with a perforating machine having a movable cutting block, of a fixed guide, vamp positioning means mounted to slide on the guide, a perforating die mounted to move with the positioning means, and means to adjust the positioning means angularly to place the perforations at an angle with respect to the center line of the vamp.

15. The combination with a perforating machine having a movable cutting block, of a fixed guide, a slide block mounted to slide on the guide, a perforating die secured to the slide block, and vamp positioning means constructed and arranged to swing angularly with respect to the perforating die.

16. The combination with a perforating machine having a movable cutting block, of a fixed guide, a slide block mounted to slide on the guide, a perforating die secured to the slide block, a gage plate carried by the slide block, vamp positioning means mounted on the gage plate and constructed and arranged to swing angularly with respect to the perforating die.

17. The combination with a perforating machine having a movable cutting block, of a fixed guide, a slide block mounted to slide on the guide, a perforating die secured to the slide block, a slide member mounted to move on the slide block, a gage plate initially adjustable on the slide member in accordance with the style of vamp, and vamp positioning means mounted on the gage plate and constructed and arranged to swing angularly with respect to the perforating die.

18. The combination with a perforating machine having a movable cutting block, of a fixed guide, a slide block mounted to slide on the guide, a perforating die secured to the slide block, a slide member initially adjustable on the slide block in accordance with a characteristic of the die, means to adjust the slide member thereafter on the block in accordance with the size of vamp, and vamp positioning means constructed and arranged to swing angularly with respect to the perforating die.

19. The combination with a perforating machine having a movable cutting block, of a fixed guide, a slide block mounted to slide on the guide, a perforating die secured to the slide block, a slide member initially adjustable on the slide block in accordance with a characteristic of the die, means to adjust the slide member thereafter on the block in accordance with the size of vamp, a gage

plate initially adjustable on the slide member in accordance with the style of vamp, and vamp positioning means mounted on the gage plate for angular movement.

20. The combination with a perforating machine having a movable cutting block, of a fixed guide, a slide block mounted to slide on the guide, a perforating die secured to the slide block, a gage plate carried by the slide block, a guide plate mounted to swing relatively to the gage plate, and a vamp supporting plate and gage arms mounted to swing with the guide plate to move the vamp angularly for perforating.

21. The combination with a perforating machine having a movable cutting block, of a fixed guide, a slide block mounted to slide on the guide, a perforating die secured to the slide block, a gage plate carried by the slide block and having arcuate slots, a guide plate having arcuate projections mounted in the slots, a vamp supporting plate secured to the guide plate, gage arms mounted on the guide plate and vamp supporting plate, and means to adjust the guide plate to the right or left to set the perforations at an angle with respect to the center line of the vamp.

22. The combination with a perforating machine having a movable cutting block and a fixed guide, of a combined vamp carrier and perforating die slidable on the guide from vamp setting to vamp perforating position, and means to adjust the vamp angularly on the carrier.

23. The combination with a perforating machine having a movable cutting block, and a fixed guide, a vamp carrier mounted to slide on the guide, means to adjust the vamp angularly on the carrier, and a perforating die secured to the carrier to slide with the latter from a vamp positioning to a vamp perforating position.

24. The combination with a perforating machine having a cutting block and an inclined guide, a vamp carrier mounted to slide on the inclined guide, a perforating die secured to the carrier, and a counterweight to enable the sliding parts to be moved easily from vamp perforating to vamp setting position.

25. The combination with a perforating machine having a cutting block, a perforating die, a vamp support constructed and arranged to swing on a pivot under perforating pressure, a spring to restore the vamp support to initial position when the pressure is released, and means to adjust the vamp angularly on its support.

26. The combination with a perforating machine having a cutting block, of a slide block mounted to slide with reference to the cutting block, a gage plate having pivotal connection with the slide block, a spring acting to lift the gage plate and adapted to

yield under punching pressure, means to adjust the vamp angularly with respect to the gage plate, and a perforating die secured to the slide block to move with the latter.

27. The combination with a perforating machine having a cutting block and a perforating die, a block having ways, a slide member adjustable in the ways, means to adjust the slide member in the ways in accordance with the size of vamp, and a vamp supporting plate mounted to move with the adjustable slide member and having provision for angular movement.

28. The combination with a perforating machine having a cutting block and a perforating die, a block having ways, a slide member adjustable in the ways, a size scale to indicate the position of the slide member in the ways, a lever to move the slide member, and a vamp supporting plate mounted to move with the adjustable member and having provision for angular movement.

29. The combination with a perforating machine having a cutting block and a perforating die, a block having ways, a slide member adjustable in the ways, means to move the member in the ways, an adjustable connection between the moving means and the slide member to provide an initial setting in accordance with a characteristic of the die, a size scale arranged for co-operation with the moving means to aid in positioning the different sized vamps, and vamp positioning means constructed and arranged to move angularly with respect to the perforating die.

30. The combination with a perforating machine having a cutting block and a perforating die, a block having ways, a slide member adjustable in the ways, a link, an adjustable connection between the link and the slide member to provide an initial adjustment in accordance with the style of die, a lever connected to the link, a size scale for co-operation with the lever, and vamp positioning means mounted to move angularly with respect to the perforating die.

31. The combination with a perforating machine having a cutting block and a perforating die, a gage plate, a member having ways in which the gage plate slides, a clamp to hold the gage plate in an initially adjusted position on the member in accordance with the style of vamp, and vamp positioning means mounted to move angularly with respect to the perforating die.

32. The combination with a perforating machine having a cutting block and a perforating die, a gage plate, a member having ways in which the gage plate slides, a clamp to hold the gage plate in an initially adjusted position on the member in accordance with the style of vamp, a block, means to adjust the member and the gage plate along the block, means to indicate the position of

adjustment in accordance with vamp sizes and a vamp supporting plate adjustable angularly on the gage plate.

33. The combination with a perforating machine having a cutting block and a perforating die, a block having ways, a slide member adjustable in the ways, means to move the member in the ways, an adjustable connection between the moving means and the slide member to provide an initial adjustment in accordance with a characteristic of the die, a gage plate adjustable in ways carried by the slide member, means to clamp the gage plate in initially adjusted position on the slide member in accordance with the style of vamp, and vamp positioning means having provision for angular movement.

34. In a vamp perforating machine, a fixed guide, vamp supporting means mounted to slide on the guide to carry a vamp from a locating to a perforating position, and a cutting block and a perforating die, one of said last-named members being mounted to move with said vamp supporting means.

35. In a vamp perforating machine, the combination of a cutting block, a guide, and a vamp carrier and die movable on the guide to carry a vamp from a vamp positioning to a vamp perforating position.

36. In a vamp perforating machine, the combination of a cutting block, a perforating die for ornamenting a vamp, a stripper on the die to support a portion of a vamp,

and means for supporting the die and stripper for sliding movement to carry a vamp from a vamp positioning to a vamp perforating position.

37. In a vamp perforating machine, the combination of a cutting block, a perforating die for ornamenting a vamp, and a vamp support constructed and arranged to swing on a pivot under perforating pressure.

38. In a vamp perforating machine, the combination of a cutting block, a perforating die for ornamenting a vamp, a vamp support, and means to effect an initial adjustment of the vamp support with respect to the perforating die in accordance with a characteristic of the die.

39. In a vamp perforating machine, the combination of a cutting block, a perforating die for ornamenting a vamp, a vamp support, and means to effect an initial adjustment of the vamp support with respect to the perforating die in accordance with the style of vamp.

40. In a vamp perforating machine, in combination, a cutting block, a perforating die for ornamenting a vamp, a vamp gage, and lever operated means for effecting successive size adjustments of the gage with respect to the die to ornament the different sizes of vamps progressively.

In testimony whereof I have signed my name to this specification.

CHARLES W. NEWTON.

764

Part of Defendants' Exhibit K.
(Letters Patent No. 1,448,751, to G. Knight,
Mar. 20, 1923.)

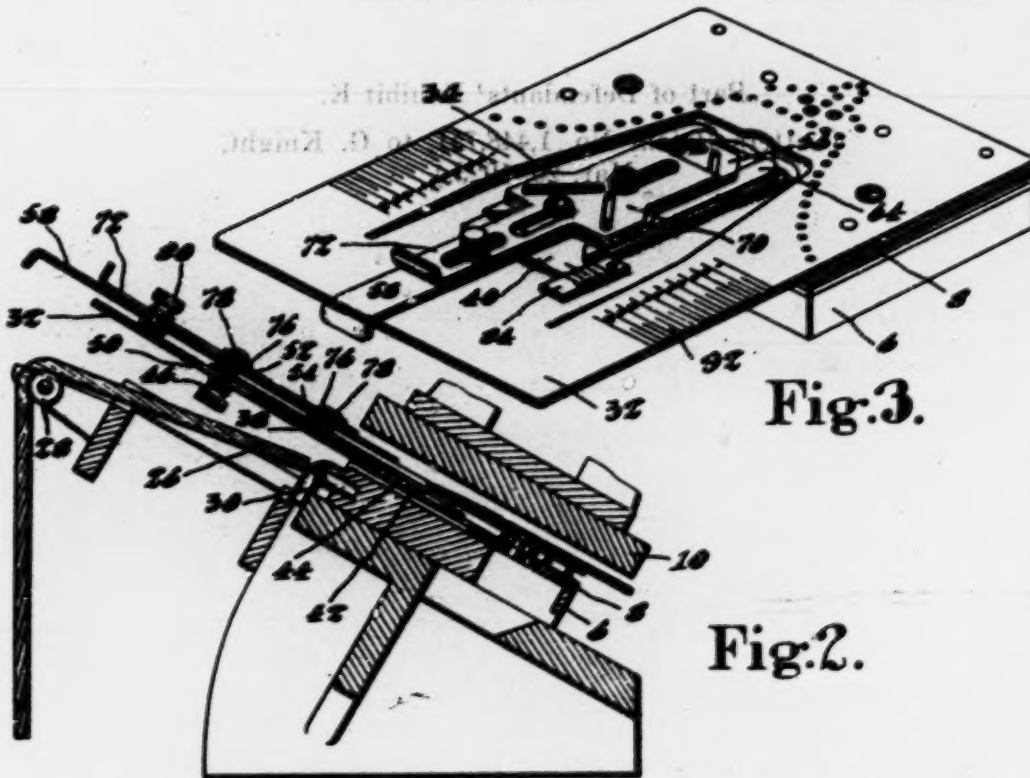


Fig. 3.

Fig. 2.

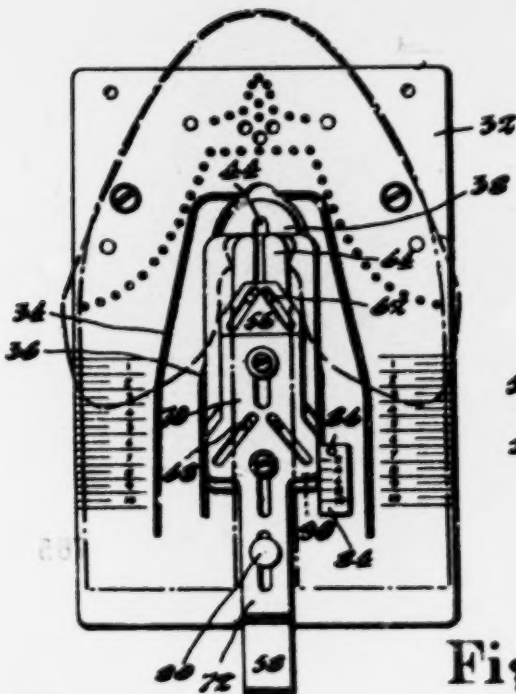


Fig. 4.

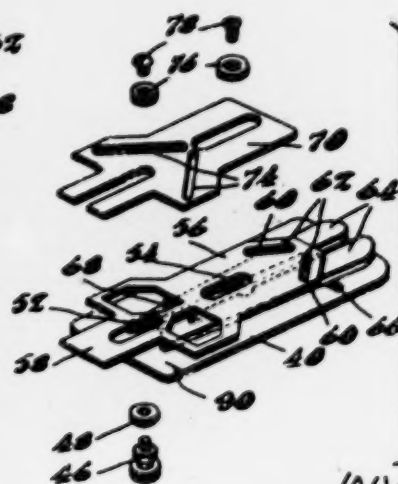


Fig. 5.

INVENTOR.

George Knight
By his Attorney
Robert H. ...

768

Mar. 20, 1923.

G. KNIGHT

1,448,751

GAUGE FOR PERFORATING MACHINES

Filed May 26, 1921

2 sheets-sheet 1

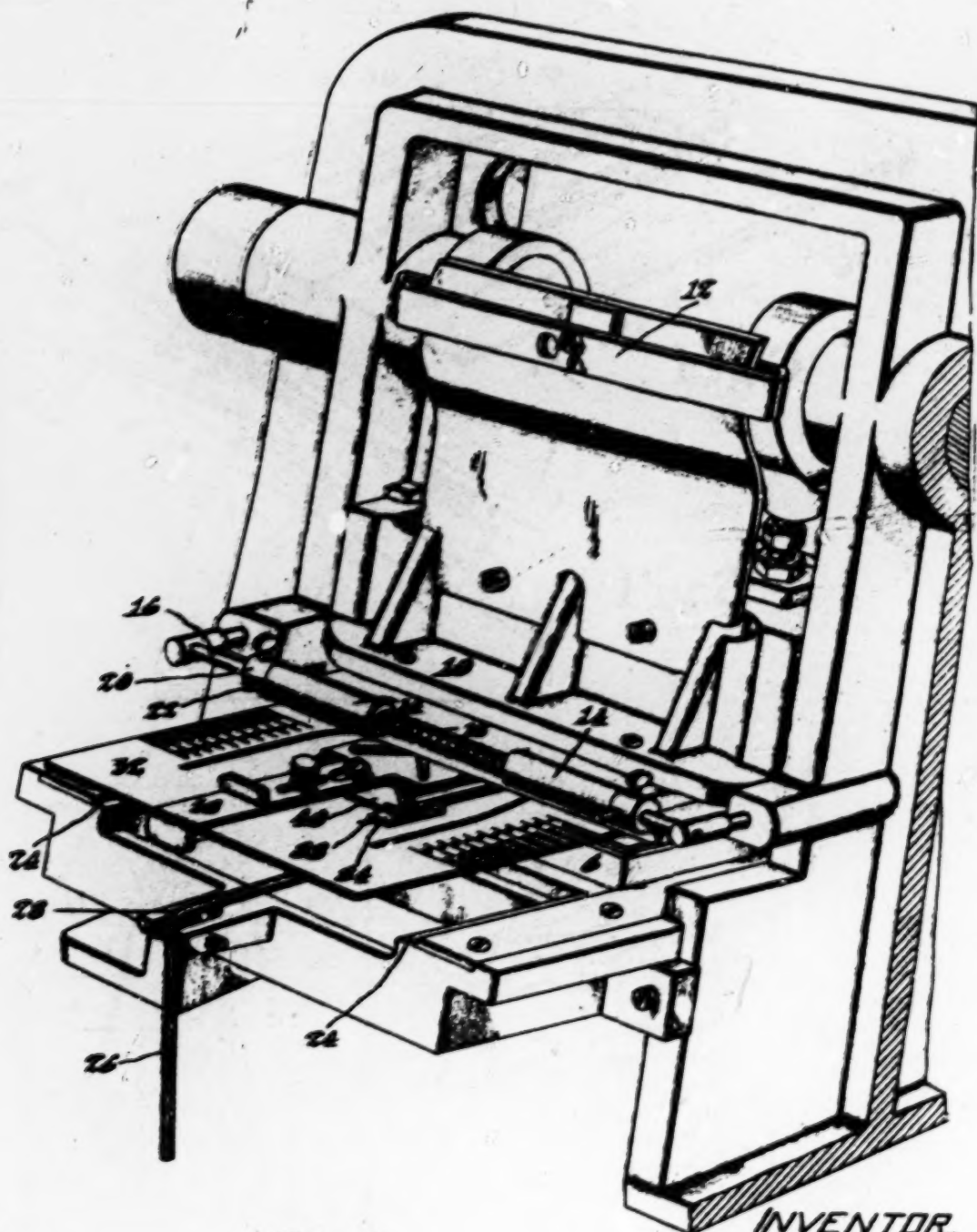


Fig.1.

INVENTOR.

George Knight
By *W. H. Attorney*
Nelson & Howard

UNITED STATES PATENT OFFICE.

GEORGE KNIGHT, OF BROCKTON, MASSACHUSETTS.

GAUGE FOR PERFORATING MACHINES.

Application filed May 24, 1921. Serial No. 472,709.

To all whom it may concern:

Be it known that I, GEORGE KNIGHT, a citizen of the United States, residing at Brockton, in the county of Plymouth and State of Massachusetts, have invented certain improvements in Gauges for Perforating Machines, of which the following description, in connection with the accompanying drawings, is a specification, like reference characters on the drawings indicating like parts in the several figures.

This invention relates to machines for operating on sheet material and is herein shown as embodied in a machine for perforating vamps.

It is usual, in the manufacture of boots and shoes, to ornament certain parts of the upper by punching designs therein with a gang punch. In punching some shoe parts, such as vamps and wing tips, difficulty is experienced in presenting the work to the punches in the proper manner because the vamps are not symmetrical and their outlines differ according to size and style and according to whether they are rights or lefts. There is also a variation in the distance at which the perforations are placed from the vamp throat, and a further variation in the pattern to be punched. The throats of the vamps are symmetrical, however, and this is taken advantage of in properly locating the vamps for punching.

An object of the invention, therefore, is to provide improved mechanism for positioning vamps to be perforated and so constructed that it can be effectively utilized to locate correctly and accurately, with respect to the perforating mechanism, vamps or wing tips of any and all sizes and styles.

In the illustrated construction, there is secured to a perforating die, a vamp supporting plate having a pair of gauge arms to enter the throat of the vamp, and, to cause these arms to fit the throats of vamps of any style, sliding cam plates are provided to open or close both ends of the gauge arms independently. When the gauge arms are thus set in accordance with a given shape of vamp it is desirable that they should thereafter be opened progressively to fit the different sizes and, as a further feature, clamping means is provided to secure the sliding cam plates together for simultaneous movement of both ends of the gauge arms. Since the longitudinal positions of the punchings with respect to the throats also vary with the dif-

ferent sizes, the gauge arms should have also a corresponding longitudinal adjustment. As shown, they are mounted on a gauge plate for bodily movement toward or from the punch, and a scale plate, graduated in sizes, co-operates with an index on the gauge plate to indicate the proper longitudinal position. In order to make this scale plate available for any style, it is preferably made adjustable in the direction of the punches.

Usually, when a vamp is presented between a cutting block and co-operating punch to receive ornamental perforations, it is out of sight of the operator and can not be safely or accurately positioned. In accordance with another feature of the invention, improved mechanism is provided by which the work is located while free and clear of the cutting block. As shown, the perforating die, vamp support and gauge arms are mounted to slide as a unit from a vamp locating position clear of the cutting block to a perforating position beneath the latter. To avoid interference with the punching mechanism by the gauge arms, the die is provided with a recess and the vamp supporting plate is provided with a depressible portion carrying the gauge arms which can yield into the recess under punching pressure. Preferably, and for economy of production, the vamp supporting plate is combined with the die stripper and the gauge arms are supported on this.

The term "vamp" has been used throughout the specification and claims merely for convenience and is intended to cover, where the prior art permits, not only vamps but wing tips and other work capable of being handled in a similar way.

Referring to the drawings,—

Fig. 1 is a perspective view of a perforating machine and a vamp locating mechanism in the position assumed when a vamp is about to be perforated;

Fig. 2 is a vertical central section with a vamp in perforating position;

Fig. 3 is a perspective view of the die and locating mechanism with the gauge arms spread to their widest extent;

Fig. 4 is a top plan view showing in broken lines a circular vamp and an ordinary vamp applied to the locating mechanism, and

Fig. 5 is an exploded view indicating how the parts are assembled.

In the illustrated machine, the vamps are

initially positioned while the die and locating mechanism are free and clear of the cutting block. When the work is located, it is moved with the die to the position indicated in Fig. 2. To a die carrier 6 are secured the punch holding plates 8 having a series of punches arranged in the desired pattern. Above these, there is mounted for reciprocation in guideways in the frame a cutting block or plunger 10 which may be operated in any usual way, as by eccentric straps and eccentrics from the drive shaft. To protect the punches and insure clean cut perforations, a paper backing strip (not shown) may be led through the guide 12, around the rollers 14 and beneath the cutting block 10. The rollers 14 are sleeved upon a rod 16 fixed to the frame and are normally pressed apart by a coiled spring 18 surrounding the rod. At one end of each roller is an adjustable clamp collar 20 having edge guiding pins 22 which may be adjusted to engage the edges of the paper.

The die holder is movable out from under the cutting block along the inclined guideways 24 by means of a cable 26 passing over the pulley 28 to a suitable treadle (not shown). Its movement in the other direction is limited by a stop 30 extending downwardly from the die holder and abutting against a portion of the framework. To support the vamp and strip it from the punches following an impression, there is provided a combined vamp supporting plate and stripper 32 yieldingly secured to the punch holder and having a series of openings corresponding to the pattern of the die. Since the throat of a vamp, when in position for perforating, enters well in between the cutting block and die, a throat gauge, in the absence of provision to prevent it, would be injured by the descent of the cutting block. As shown, the die is provided with a recess and the vamp supporting plate 32 has U-shaped slots 34 and 36 forming a spring tongue or depressible portion 38 carrying the locating mechanism. Thus, when the cutting block descends upon the locating mechanism, the latter is free to yield into the recess.

In describing the vamp locating mechanism the toe end is regarded as the front. A gauge plate 40 is mounted for longitudinal adjustment on the tongue 38 and is guided at the front end (Fig. 2) by a downwardly extending stud or pin 42 which enters a longitudinal slot 44 in the plate 32. The gauge plate is secured in adjusted position by a clamp screw 46 and washers 48, said screw extending through a slot 50 into a tapped guide boss 52 on the gauge plate. This boss 52 and a similar one 54 serve as guides for a pair of superimposed sliding cam plates 56 and 70 which are slotted to embrace the guide bosses. The lower slide plate 56 is moved longitudinally by a shank extension

58 which has a downturned end for manipulation by the operator. Near the front of the lower slide plate 56 is a pair of inclined slots 60 forming cams which engage guide pins 62 extending upwardly from a pair of gauge arms 64 which enter the throat of the vamp. Movement of the slide plate 56 opens or closes the front ends of the gauge arms. The gauge arms are confined against longitudinal movement with respect to the gauge plate 40 by means of downward extensions of the pins 62 which enter a cross slot 66 in the gauge plate, this construction allowing opening and closing movement of the arms. Guide pins 68, near the rear ends of the gauge arms, extend upwardly through cut out portions of the slide plate 56 and enter inclined cam slots 74 in an upper slide plate 70 which is manipulated by the extended shank 72 and its upturned end portion. The movement of these sliding cam plates independently causes the gauge arms to open or close so that they can be made to fit the throat of any style or shape of vamp.

To retain the above described movable parts in the position to which they are adjusted, they are held frictionally by means of washers 76 and screws 78, said screws extending downwardly and being threaded into the upper parts of the two guide bosses 52 and 54. When the gauge arms are once set to conform to the shape of the vamp, they can then be moved simultaneously at both ends, if the sliding cam plates are secured together. This may be advantageously accomplished by a clamp screw 80 which extends through a slot in the shank 72 and is threaded in a boss on the shank 58. To indicate the longitudinal position of the gauge plate 40, it has an index line 90 for co-operating with a scale plate 84 graduated in sizes and secured adjustably in place by a clamp screw 86 extending upwardly through a longitudinal slot 88 in the vamp supporting plate. The sides of the vamp supporting plate have suitably numbered scales 92 for use in positioning circular vamps which usually contact with only the front ends of the gauge arms. When the throat of a vamp is of such shape that it will not conform readily to the outer sides of the gauge arms shown, the latter may be quickly detached and replaced by others of a more suitable shape. When another system of size measurement is used, the scale plate 84 may readily be replaced by a different one suitably graduated.

In the use of the apparatus a vamp is placed on the supporting plate 32 when the latter is withdrawn from the cutting block. Starting with size 4, for instance, of a given style, the gauge plate 40 is first moved to set the ornamental perforations at the desired distance from the throat and is secured by the clamp screw 46. Then the

scale plate 84 is moved longitudinally until the scale line designating size 4 coincides with the index line 90 on the gauge plate. The front and rear ends of the gauge arm 64 are then moved independently until their outer edges conform exactly to the shape of the throat. Then, clamping the sliding plates together by means of the screw 80, the shape defined by the spaced gauge arms may be maintained while still leaving them free for opening and closing movement simultaneously to fit the different sizes progressively. When the next size is to be positioned, the gauge arms are spread simultaneously and the clamp screw 46 loosened to slide the gauge plate 40 and its index line 90 to the next size line on the scale plate 84. Thereafter the other sizes are operated upon in a similar way.

Although the invention has been shown and described in connection with a particular apparatus, it should be understood that it is not in any way limited to the illustrated construction.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:

1. In a perforating machine, means for locating vamps comprising a vamp support, means to engage the throat of a vamp to center the same, slide plates supported by said throat engaging means, and means for sliding said plates to cause the throat engaging means to fit the throats of different vamps.

2. In a perforating machine, means for locating vamps comprising a vamp support, a pair of gauge arms to enter the throat of a vamp, slide plates mounted on the gauge arms, and means for sliding the plates to open or close the gauge arms to fit the throats of different vamps.

3. In a perforating machine, means for locating vamps comprising a vamp support, a pair of gauge arms to enter the throat of a vamp and mounted for relative angular movement, a plate supported on said arms for longitudinal movement, and means, actuated by the longitudinal movement of said plate, for causing relative angular movement of said arms in accordance with the shape of the throat of a vamp.

4. In a perforating machine, means for locating vamps comprising a vamp support, a pair of gauge arms each having a guide pin, a slide plate movable longitudinally of the arms and having cam slots engaging the pins, and means for moving the slide plate to cause the arms to approach or recede from one another at one end to fit the throat of a vamp.

5. In a perforating machine, means for locating vamps comprising a vamp support, a pair of gauge arms for engaging the throat of a vamp, a pair of plates movable

longitudinally of the gauge arms, cam connections between each plate and the gauge arms, and means for moving the plates to vary the relative positions of the gauge arms.

6. In a perforating machine, means for locating vamps comprising a vamp support, a pair of gauge arms having guide pins, slide plates movable longitudinally of the arms and having cam slots engaging the pins, and means for moving the slide plates independently to cause the arms to fit the throats of different styles of vamps.

7. In a perforating machine, means for locating vamps comprising a vamp support, a pair of gauge arms for engaging the throat of a vamp, a pair of independently movable plates, each connected to the gauge arms near one end of the latter to control the amount of separation, and means for clamping the plates together for simultaneous movement to cause the arms to fit progressively vamps of different sizes.

8. In a perforating machine, means for locating vamps comprising a vamp support, a pair of gauge arms having guide pins, slide plates movable longitudinally of the arms and having cam slots engaging the pins, and means for securing the slide plates together for simultaneous movement to engage progressively vamps of different sizes.

9. In a perforating machine, means for locating vamps comprising a vamp support, a pair of gauge arms having guide pins, slide plates movable longitudinally of the arms and having cam slots engaging the pins, means for moving the slide plates independently to cause the arms to fit the throats of different styles of vamps, and means for securing the slide plates together for simultaneous movement to engage progressively vamps of different sizes.

10. In a perforating machine, means for locating vamps comprising a vamp support, a pair of gauge arms having front and rear sets of guide pins, superposed plates movable longitudinally of the arms and having cam slots engaging the pins, the lower one of said plates being cut out to allow one set of pins to have movement independently of said lower plate, and means for moving the upper plate to actuate the gauge arms at one end.

11. In a perforating machine, means for locating vamps comprising a gauge plate having guide bosses, a pair of gauge arms mounted to open and close on said gauge plate, slide plates having slots for guided movement longitudinally on the guide bosses, and connections between the slide plates and the gauge arms to open and close the latter upon longitudinal movement of the slide plates.

12. In a perforating machine, means for locating vamps comprising a gauge plate

having a transverse slot and guide bones, gauge arms having pins entering said transverse slot to retain the arms against longitudinal movement relatively to the gauge plate, guide pins carried by said gauge arms, slide plates having guide slots engaging said guide bones and having cam slots engaging said guide pins, and means for moving the slide plates to separate or bring together the gauge arms.

13. In a perforating machine, in combination, a vamp support, vamp perforating means, a gauge plate, gauge arms movable on the gauge plate to fit the throat of a vamp, means for simultaneously moving both ends of the gauge arms to fit progressively vamps of different sizes, and means for adjusting the gauge plate relatively to the perforating means in accordance with said sizes.

14. In a perforating machine, in combination, a vamp supporting plate, a perforating die, a gauge plate slidable longitudinally on the supporting plate and having vamp positioning means, a size scale secured to the supporting plate for co-operation with an index on the gauge plate, means for clamping the gauge plate in adjusted positions corresponding to the different sizes of vamps, and means for adjusting the scale to adapt it for use with different styles of vamps.

15. In a perforating machine, in combination, a vamp support, vamp perforating means, a gauge plate, gauge arms carried by the gauge plate, means for moving said gauge arms laterally and angularly to fit any shape or size of vamp throat, means for adjusting said gauge plate to an initial position in accordance with the style of perforating, a size scale, and means for securing said scale in an initial position corresponding to the size of the vamp.

16. In a perforating machine, a cutting

block, a punch plate having a recess, a vamp supporting plate having a depressible cut-out portion, and a vamp gauge carried by said depressible portion and arranged to yield into said recess under punching pressure.

17. In a perforating machine, a cutting block, a die, a combined vamp support and stripper plate secured to said die, and a vamp gauge carried by said plate to position a vamp with respect to said die.

18. In a perforating machine, a cutting block, a die, a stripper plate secured to said die, a gauge secured to the stripper plate for engaging the throat of a vamp, and means for carrying the die with its stripper plate and gauge from a vamp locating position free and clear of the cutting block to a vamp perforating position.

19. In a perforating machine, a cutting block and a perforating die arranged for relative movement toward and from each other to perform a perforating operation, a guideway for guiding one of said members in another direction for carrying a vamp from a locating position to a perforating position, a pair of gauge arms carried by said member, and means for opening and closing said arms at both ends to cause them to fit the throat of a vamp.

20. In a perforating machine, a frame, a cutting block mounted to reciprocate in the frame, a guideway, a die mounted to slide on the guideway from a position free and clear of the cutting block to an operative position with respect to said cutting block, a vamp supporting plate carried by said die, a throat gauge having a pair of arms to enter the throat of a vamp, and means for moving the gauge arms at both ends to cause them to locate the vamp.

In testimony whereof I have signed my name to this specification.

GEORGE KNIGHT.

Part of Defendants' Exhibit K.

**(Letters Patent No. 1,475,181 to F. M. Furber,
November 27, 1923.)**

774 Nov. 27, 1923.

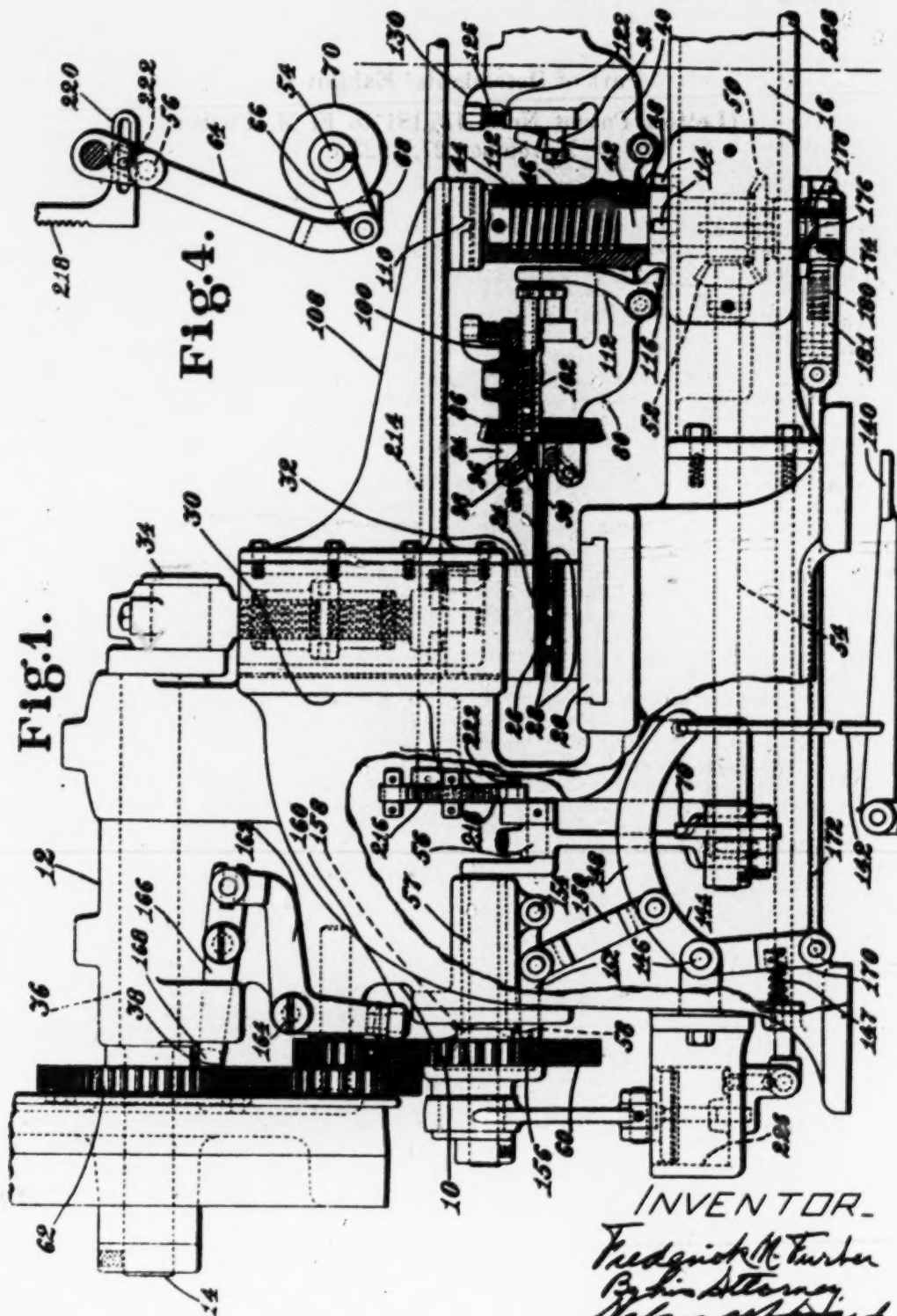
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Filed April 19, 1920

3 Sheets-Sheet 1



INVENTOR.

Fredrick M. Furber
 B. his Attorney.
 Nelson & Howard

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F. M. FURBER

PROCESS OF AND MACHINE FOR PERFORATING

Filed April 19, 1920

3 Sheets-Sheet 2

Fig. 5.

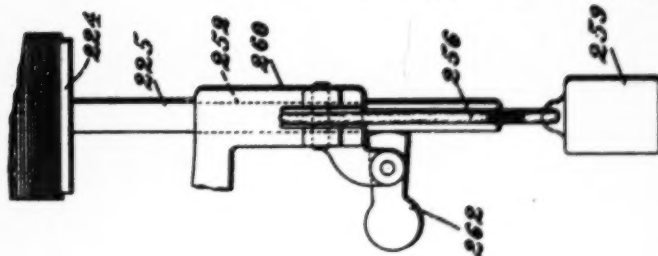


Fig. 2.

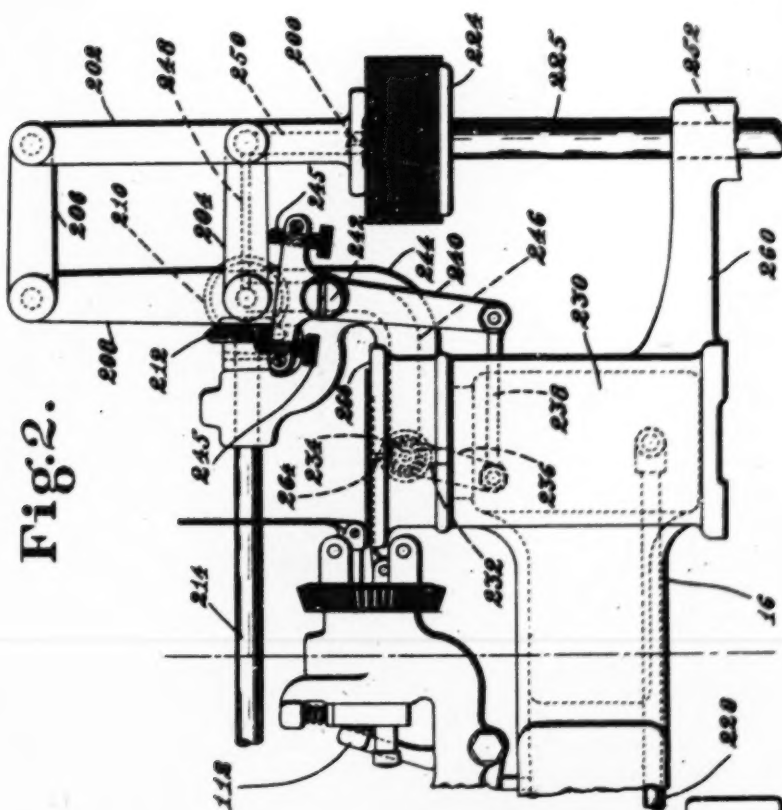
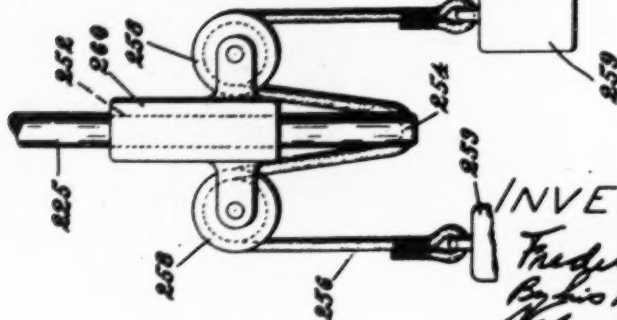


Fig. 6.



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3 Sheets-Sheet 3

Fig. 3.

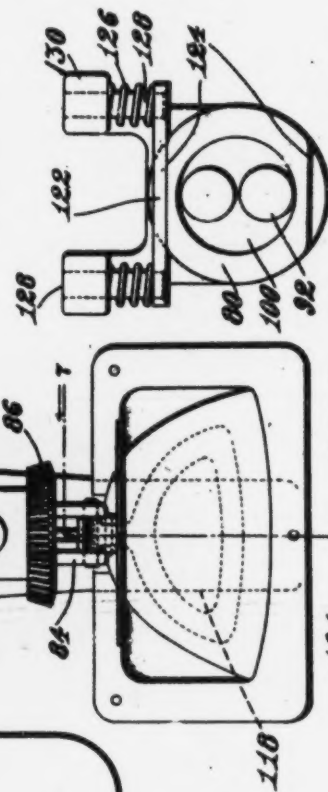
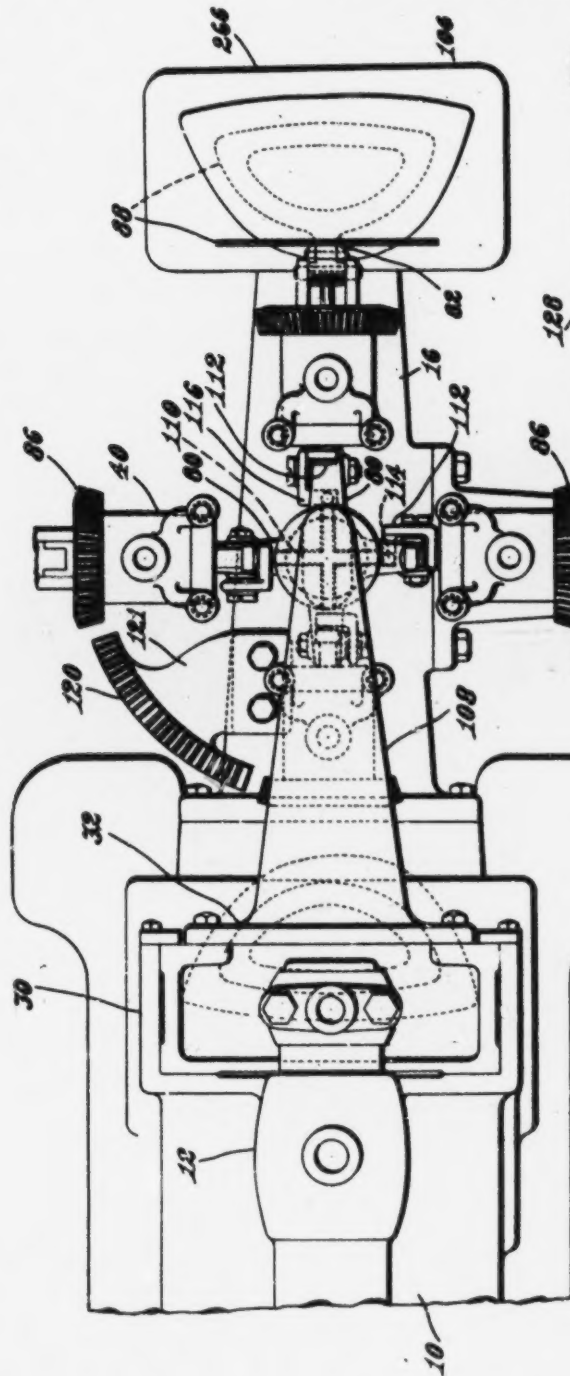


Fig. 8.

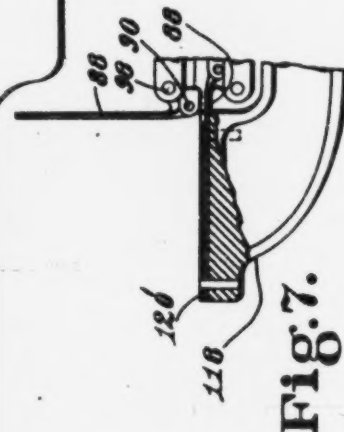


Fig. 7.

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UNITED STATES PATENT OFFICE.

FREDERICK M. FURBER, OF REVERE, MASSACHUSETTS, ASSIGNOR TO UNITED SHOE MACHINERY CORPORATION, OF PATERSON, NEW JERSEY, A CORPORATION OF NEW JERSEY.

PROCESS OF AND MACHINE FOR PERFORATING.

Application filed April 19, 1920. Serial No. 375,021.

To all whom it may concern:

Be it known that I, FREDERICK M. FURBER, a citizen of the United States, residing at Revere, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Processes of and Machines for Perforating, of which the following description, in connection with the accompanying drawings, is a specification, like reference characters on the drawings indicating like parts in the several figures.

This invention relates to the cutting of stock, such, for instance, as sheet material used in the manufacture of shoes, and is herein set forth by way of illustration with particular reference to its use in the production of ornamental perforations in tips to be used as parts of shoe uppers, though, of course, the invention is in no way limited to such use.

It is an object of the invention to cut stock in such a manner as to insure clean cut edges, free from ragged or frayed portions or other defects, and this with the elimination of the various disadvantages attendant upon the use of permanent cutting beds, such for example as those of wood or metal, and at the same time without the use of backing strips of paper or the like which, since they are consumed during the operation, represent a continuous and undesirable, operating expense.

In one aspect the present invention contemplates an improved method of cutting or perforating sheet material, including the positioning of a plurality of sheets of material in a pile so that a sheet subsequently to be cut will itself serve as a cutting bed for a cutting operation performed upon other sheet material in the pile which is in contact with this cutting bed, performing a cutting operation on said other sheet material, and subsequently utilizing an adjacent piece of sheet material as a cutting bed while performing a cutting operation on the first mentioned sheet. In the disclosed exemplification of my invention, two sheets of material may be placed back to back and one cut or perforated while the other serves as a cutting bed. Thereafter the cut or perforated sheet may be replaced by a

fresh sheet, and the sheet which previously served as a cutting bed may be cut or perforated while the fresh sheet serves as a cutting bed.

In utilizing the invention in this manner it is, for many purposes, unnecessary to provide for an exceedingly nice regulation either of the position or of the depth of the cut. For instance, if the invention is utilized in perforating tips, the pieces of stock will be placed flesh side to flesh side, and such a slight penetration by the perforating tool into the flesh side of the tip which serves as a cutting bed as will insure clean cut perforations in the other tip will do no material harm, even though the perforations made later on do not exactly coincide with the above mentioned slight penetration. On the other hand, where such lack of coincidence is not permissible or where an exact regulation of the depth of cut is essential, the invention may still be utilized by paying due regard to these matters.

In one of its aspects my invention comprises a method of perforating or otherwise cutting stock in accordance with the foregoing.

In another aspect my invention provides an improved machine for cutting or perforating stock. Considered from this viewpoint, it is an object of my invention to provide a machine constructed and arranged to cut or perforate pieces of stock while utilizing other pieces of stock as the cutting bed, said last named pieces of stock being thereafter cut or perforated while fresh pieces serve as the cutting bed.

A feature of the invention consists of the provision in such a machine of novel means for presenting pairs of pieces of stock to the cutting tool with their surfaces in contact so that one piece may serve as a cutting bed while the other is cut, either with or without the provision of means to reverse the position of the pieces of stock in relation to the cutting tool to facilitate the presentation of a series of pairs to the cutting tool. By such reversal, the piece which previously acted as a cutting bed will be brought into cutting relation to the tool while the fresh piece which replaces the cut

piece will be in position then to serve as the cutting bed.

A further feature of my invention consists of the provision of a pair or a series of pairs of reversible grippers, each provided with a pair of individually pivoted mechanically operable clamping jaws to present the stock to and remove it from the cutting tool.

Other features of the invention consist of the provision of means operated in timed relation to a cutting tool to open and close the clamping jaws of the grippers-at a receiving and at a discharge station, and of means, exemplified as spring held plungers, to hold said clamping jaws closed except when under the influence of said opening means.

A further feature of the invention consists of the provision of means, illustrated as a suction grapple, to transfer the cut or perforated piece of stock from the opened gripper or grippers to a suitable support on which they may be stacked.

Still another feature of the invention consists of the provision of means controlled by the operation of the cutting tool for insuring the correct presentation of the pieces of stock thereto and for preventing their movement during the cutting operation.

With the above and other objects and features in view, the invention will now be described and explained in connection with the accompanying drawings, and pointed out in the claims. It is to be noted, however, that the machine of the drawings is shown for illustrative purposes only, and that in certain aspects the invention is in no way limited thereto.

In the accompanying drawings,

Fig. 1 is a side elevation of the major portion of the machine with certain parts broken away and other parts in section;

Fig. 2 is a similar view of the remainder of the machine;

Fig. 3 is a plan view showing conveyor mechanism used to present the work to the perforating means and indicating its relation to the same;

Fig. 4 is a detail part of the driving mechanism for the conveyor;

Figs. 5 and 6 are front and side views, respectively, of counterbalance mechanism controlling the work receiving support;

Fig. 7 is a cross-section on the line 7-7 of Fig. 3; and

Fig. 8 is a detail view of an impositive latch for preventing undesired rotation of the work grippers.

The machine is provided with a main frame 10 having an upstanding portion 12 and with a main drive shaft 14. Attached to the main frame and extending to the right therefrom as viewed in Fig. 1 is a supplemental frame member 16.

The main frame is provided with a preferably removable support 20 for the cutting dies; these in the illustrated machine comprising a row of tubular punch members 24 and a pinking die 26 of such conformation, as upon the operation of the machine, to form a row of perforations parallel to the edge of a tip and at the same time to pink the edge of the tip. These dies may conveniently be provided with the usual spring supported stripper 28 to insure the easy separation of the work therefrom after each cycle of operation of the machine. In co-operative relation to the dies and carried by a suitable guideway 30 of the main frame is the co-operating tool part, in this case an adjustable plunger 32 suitably connected, as indicated in Fig. 1, to a crank member 34 of a shaft 36 arranged to be operatively connected to the main drive shaft 14, for instance by a Horton or other one-revolution clutch provided with a dog 38.

To present the work to the perforating or other cutting means the machine is provided with a rotary conveyor 40 pinned to and carried by a shaft 42 journaled in the supplemental frame member 16 and arranged for limited vertical movement therein. A spring 44 surrounding the shaft 42 and housed within a sleeve 46 of the rotary conveyor bears at its lower end against the end of a sleeve 48 carried by the frame member 16 and so tends to hold the conveyor 40 and its shaft 42 at their extreme upper position.

Keyed to the shaft 42 for sliding movement relatively thereto and suitably supported by the supplemental frame member 16 is a bevel gear 50 meshing with a bevel gear 52 carried by a shaft 54 suitably journaled in the main and supplemental frames. This shaft 54 is driven in timed relation to the plunger 30 in any suitable manner as by the intermittent grip device of Fig. 4 which receives its power through crank 56 from shaft 57 journaled in the main frame and connected as by a Horton clutch provided with a dog 58 to a spur gear 60 driven through a suitable train of gearing from gear 62 on the main drive shaft. The intermittent grip device referred to may consist of a connecting rod 64 journaled at one end on the crank pin 56 and connected at its other end to a lever 66 fulcrumed on the shaft 54. Carried by the end of the connecting rod 64 remote from the crank pin 56 is a clutch member 68 co-operating with a clutch disk 70 carried by shaft 54 and so arranged as to drive the shaft 54 step by step in a clockwise direction as viewed in Fig. 4. This intermittent grip device and the gears 50 and 52 are so arranged that shaft 42 and the conveyor carried thereby are moved one-quarter of a revolution for each reciprocation of the plunger 32.

The conveyor 40 is illustrated as provided

with four arms 80 each carrying a gripper 82 comprising a head 84 having a bevel gear 86 rigidly connected therewith. A pair of clamping jaws 88 are carried by each gripper head, each jaw being pivoted as at 90 to the head of a plunger 92 and being provided with a pair of fingers 96 engaging a pin 98 carried by the head 84, as shown in Fig. 1, so that upon endwise movement of the plunger 92, the jaw 88 will be swung from a horizontal to a vertical position, rotating approximately about the pin 90. Two of the plungers 92, one for each gripper jaw of each clamp, are housed within each sleeve 100, one of these sleeves having a suitable bearing in each arm 80 of the conveyor and being formed rigid with the gear 86 and head 84. A spring 102 surrounding each plunger 92 normally tends to hold the gripper jaws in approximately a horizontal position with the work clamped therebetween.

The work is thus resiliently supported for presentation to and for receiving the action of the tool parts. It will be evident, however, that upon a movement of a plunger 92 away from the shaft 42 of the conveyor, the corresponding gripper jaw will be raised and will be held so raised as long, and only as long, as the plunger is held in its displaced position.

The illustrated machine is provided with a loading station indicated at 104 and with a discharge station shown at 106 in Fig. 3 and the latter being shown more fully in elevation in Fig. 2. At these stations it is desirable to raise the upper gripper jaw so that the work may be placed in or removed from the conveyor. For this purpose the plunger 32 is provided with an arm 108 overhanging the conveyor 40 and provided at its end with a cam in the form of a cross-shaped projection 110 arranged to co-operate with a similar depression at the upper end of sleeve 46 of the conveyor so that upon the downward movement of the plunger, the conveyor will be correspondingly depressed. The projection 110 is made, as clearly shown in Fig. 1, with a taper so that, in co-operation with the depression at the upper end of sleeve 46 it serves to insure the correct presentation of the stock to the perforating means as well as to prevent undesired movement of the stock during the perforating operation.

Pivoted to each arm of the conveyor is a finger 112 so formed as to contact with the end of the uppermost plunger 92. Adjacent to the receiving and discharging stations the supplemental frame is provided with pins or other suitable projections 114 positioned to co-operate with arms 116 of fingers 112 when the respective fingers reach those positions with the result that the depression of the conveyor 40 rocks the finger 112 in such a manner as to thrust plunger 92 forward

against the action of spring 102 so as to move the upper clamping jaw to the raised position of Fig. 7. When the gripper at the receiving station is in this condition, a piece of stock can be placed by the operative in position on the lower clamping jaw, a suitable work support 118 and an edge gage 120' being there provided to facilitate the correct placing of the work.

A gear segment 120 is rigidly supported as by a bracket 121 carried by the frame member 16 in such a position as, in co-operation with the bevel gears 86, to rotate each gripper through half a revolution as it passes thereby. To prevent undesired rotation of the grippers at other times, each arm 80 of the carrier carries an impositive latch mechanism shown in detail in Fig. 8. This mechanism comprises a bar 122 pressed against one of a pair of flattened portions 124 of the sleeve 100, as by suitable springs 126. Each bar 122 is shown as provided with a pair of pins 128 movable in guides 130 carried by arms 80. The tension of springs 126 is such as to hold the bar 122 against the surfaces 124 with sufficient force to prevent any accidental rotation of the sleeve 100 and the gripper, but at the same time permits the rotation of the grippers when, during the rotation of the conveyor, a gear 86 comes into engagement with the rack 120.

Suitable mechanism, shown particularly in Figs. 2, 5 and 6, is provided for removing the finished work from the conveyor and stacking it at the discharging station, as will be more fully hereinafter described.

The illustrated machine is controlled through a treadle 140 (see Fig. 1) connected by a rod 142 to a bell crank lever 144 fulcrumed at 146 to the main frame and provided with a spring 147 tending to hold the treadle and the bell crank lever in inoperative position. Connected to a curved arm 148 of the bell crank lever is a link 150 pivoted at its other end to a lever 152, the lever being fulcrumed at 154 to the main frame and having an end 156 arranged to be moved into and out of the path of movement of the clutch dog 58 in accordance with the position of the treadle. The driven member of the clutch thus controlled by the movement of lever 156 carries a cam having a rise 158 in the path of movement of which is a roll 160 carried by a bell crank lever 162 pivoted at 164 to the main frame and connected at its other end to a lever 166 also fulcrumed on the main frame and having an end 168 extending into the path of movement of the clutch dog 38.

Pivoted to the arm 170 of bell crank lever 144 is a rod 172 carrying at its other end a spring-pressed latch member 174 having a beveled end 176 co-operating with a similar shaped groove 178 formed around the shaft

42 near its lower end. A spring 180 surrounding the stem 181 of latch member 174 tends to hold the beveled end of the latter in groove 178 so as to prevent upward movement of shaft 42 and the conveyor.

When the treadle 140 is depressed the end 156 of lever 152 is withdrawn from contact with the clutch dog 58 whereupon the clutch operatively connects shaft 57 with gear 60 so that the conveyor 40 is rotated a quarter of a revolution. The depression of the treadle also withdraws the end 176 of latch member 174 from groove 178 so that the conveyor 40 is free to rise, which it immediately does under the influence of spring 44. This, of course, results in the closing of the open gripper jaws and prevents any undesired movement of the work relative to the grippers. By the time that the rotary conveyor has made a quarter revolution the rise 158 of the cam carried by the clutch controlling the rotation of shaft 57 engages the roll 160 and rocks bell crank lever 162 so as to withdraw the end of lever 166 from clutch dog 38. This renders operative the clutch connecting shaft 36 with the main drive shaft and reciprocates plunger 32 to perforate or otherwise cut the work. The downward movement of the plunger depresses the conveyor 40 so that the grippers which by the movement of the conveyor have been brought to the receiving and discharging stations are opened and the conveyor is again latched in its lower position by the engagement of latch member 174 with groove 178. Upon the release of the treadle, spring 147 ensures the return of bell crank lever 144 and the parts associated therewith into such position that the shafts 57 and 36 come to rest after each has made a single revolution.

The means for removing the finished work at the discharge station, as shown in Fig. 2, comprises a suction grapple 200 formed at the lower end of an arm 202, the latter being carried by a pair of links 204, 206, pivoted to a standard 208. Rigidly connected to link 204 is a bevel gear 210 meshing with a similar gear 212 carried at the end of a shaft 214 suitably journaled in bearings carried by the main and supplemental frames. The end of the shaft 214 remote from the suction grapple carries a pinion 216 meshing with a rack 218 mounted for sliding movement in guides carried by the main frame and provided at its lower end with a slotted arm 220 the slot of which engages a crank pin 222 carried by shaft 57. The throw of crank pin 222 and the size of pinion 216 are such that during each complete rotation of shaft 57, shaft 214 makes two semi-rotations in opposite directions with the result that the suction grapple 200 is moved from the position of Fig. 2 into position to pick up a tip at the discharging station and

back again to carry it to a work support 224 carried by a plunger 225 and deposit it upon the top of the pile or stack formed thereon.

Suction for the grapple 200 may be provided in any suitable way as, for instance, by a pump 226 connected through a pipe 228 with an equalizing chamber 230 carried by or formed as part of the supplemental frame member 16. The chamber 230 is connected through a passage 232 with a valve 234 of any suitable form, the latter being provided with an arm 236 connected through a link 238 with a 3-armed lever 240 fulcrumed at 242 to a bracket 244 carried by frame member 16. The other arms of this 3-armed lever are provided each with an adjustable contact member such as a set screw 245 positioned in the path of movement of the link 204 so that as the suction grapple 200 reaches its position at either end of its path of movement, the lever 240 will be rocked and will correspondingly rock the arm 236 to open or close valve 234, as the case may be. The valve is so arranged that as the suction grapple comes into contact with the tip carried by the gripper, the valve is opened and suction is applied to the grapple through suitable passageways indicated at 246, 248, 250 in Fig. 2. Thus the tip is caused to adhere to the grapple while the latter moves over and transfers the tip to the stack carried by support 224. As the tip reaches the stack, arm 236 is swung back to cut off the suction, the valve being so formed as at that time to open the passage 246 to atmospheric pressure.

Arm 202 and standard 208 are suitably offset so that the grapple 200 has a clear path of movement.

The plunger 225 is mounted for vertical movement in a suitable guideway 252 carried by frame member 16 and is provided at its lower extremity with a groove 254 receiving a cord or cable 256 passing over pulleys 258 carried by a bracket 260 supported by frame member 16, appropriate means such as a weight or weights 259 being attached to cord 256 to hold the support 224 in elevated position. A one-way catch 262 engaging plunger 225 permits the support 224 to move downwardly under the influence of the pressure exerted by the suction grapple 200 in depositing a tip on the stack but prevents upward movement thereof under the influence of weights 259 so that the top of the stock is at all times maintained in position to receive a tip.

The present invention contemplates the utilization of one blank or article to be perforated or otherwise cut as a cutting bed for another similar article, that article which serves as a cutting bed being later on perforated while a fresh article is used as a cutting bed. The described machine is

adapted for use in this manner, a pair of tips being carried back to back between the clamping jaws of the gripper to the perforating mechanism. The throw of the plunger of the latter is so adjusted that the perforating mechanism is caused to perforate the tip adjacent thereto and barely to penetrate the back of the more remote tip. Thus the more remote tip acts as a cutting bed and serves to insure perforations of a high quality and with clean cut edges similar to those obtained with a paper backing strip. During the next cycle of operation of the machine, the gripper carrying the tip which has just been perforated is rotated through 180° by the engagement of its gear 86 with rack 120 and at the conclusion of still another cycle of operation is brought to the discharging station. It will be noted that the tip at the time of its perforation by the illustrated machine is the lower one of a pile but by the time it reaches the discharge station, the pile has been reversed, so that the perforated tip is the upper one of the pile. It is thus in position to be removed by the suction grapple, the lower tip being held in position at this time by suction exerted through an opening 264 in the work support 266 of the discharge station and controlled by valve 234 in the same manner that the suction of the grapple is controlled. When, now, the treadle is depressed to start another cycle of operations, the open gripper at the discharge station is closed and that gripper moves to the receiving station with but a single tip held therein. This tip, however, is one which has previously served as a cutting bed but as yet is unperforated. It is, moreover, now in perforating position with its back or flesh side up. Thus the tip reaches the receiving station and, as the machine finishes the last mentioned cycle of operation, the gripper which is just reaching the receiving station is opened and the operative places a new tip therein with its flesh side down. Upon further operation of the machine, the gripper is closed and these two tips move on to the punching position. The tip which has previously served as a cutting bed is now perforated while the new tip performs the function of the cutting bed.

It is to be understood that in this specification the terms "tip", "flesh side", "punch", "pink", "perforate", etc., are used in an illustrative rather than in a restrictive sense, and that it is intended that these terms shall have a broad range of equivalents, limited only as may be required by the prior art, except where in any particular case the contrary is clearly apparent from the context. It is evident, of course, that the work operated upon is not necessarily a tip and that only when the article is of leather will there be a flesh side. The operation performed,

moreover, is not limited to perforating and pinking, but may be cutting of other kinds. Moreover, while the described machine is manually fed and controlled, it should be distinctly understood that this is for illustrative purposes only and that the invention and the appended claims are not to be construed as limited thereby.

Having described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:

1. The process of cutting sheet material which comprises the steps of placing two sheets of material with their surfaces in contact, cutting through the first sheet and part way through the second, placing a third sheet in contact with the cut side of said second sheet, and cutting through said second sheet and part way through said third sheet.

2. The process of cutting sheet material which comprises placing two sheets of material with their surfaces in contact, performing a cutting operation upon the first sheet while utilizing the adjacent surface of the second sheet as a cutting bed to receive the thrust of the cutter, placing a third sheet of material in contact with that face of the second sheet which previously received the thrust of the cutter, and performing a cutting operation upon the second sheet while utilizing the adjacent surface of the third sheet to receive the thrust of the cutter.

3. The process of cutting sheet material which comprises successively positioning sheets of material to serve as cutting surfaces in receiving the cutting edge of a cutter, and performing cutting operations upon successive sheets of material, each of which has previously served as a cutting surface, while each in turn is positioned with that one of its surfaces which previously served as a cutting surface in contacting relation with the surface of a fresh sheet.

4. The process of perforating which consists in positioning two pieces of stock with their unfinished surfaces back to back and operating a perforating tool so as to perforate one of the pieces and slightly to penetrate the unfinished surface of the other piece which thereby acts as a backing.

5. The process of perforating which consists in positioning two pieces of stock back to back and operating a perforating tool so as to perforate one of the pieces and slightly to penetrate the other piece, then placing the slightly penetrated piece and a fresh piece back to back and operating the perforating tool to perforate the previously slightly penetrated piece and slightly to penetrate the fresh piece.

6. The process of perforating which consists in positioning two pieces of stock with

their surfaces in contact and operating a perforating tool so as to perforate one of the pieces and slightly to penetrate the other piece, then placing a fresh piece in contact with the cut side of the slightly penetrated piece and operating the perforating tool to perforate the previously slightly penetrated piece and slightly to penetrate the fresh piece.

7. The process of cutting blanks which consists in placing a pair of blanks in surface contact, operating a cutting tool on one of them while utilizing the other as a backing and reversing said other blank for cutting while utilizing a fresh blank as a backing.

8. A machine for cutting sheet material for shoe parts having a cutting tool, means for supporting two pieces of stock with their flesh surfaces in contact and in operative relation to the cutting tool, and means for operating the cutting tool to cut all the way through one of the pieces of stock and slightly into the flesh surface of the other piece.

9. In a machine for punching shoe parts, the combination of a punch and punch block, a conveyor arranged to carry a pair of pieces of stock arranged back to back, between the punch and punch block, and means relatively to reciprocate the punch and punch block to cut one of the pieces of stock while the other piece serves as a cutting bed.

10. In a machine of the class described, the combination of a cutting tool, a gripper for holding two pieces of stock with their surfaces in contact and presenting them to the cutting tool, and means for operating the cutting tool to cut through one of the pieces of stock and slightly into the other piece.

11. In a machine of the class described, a punch, a punch block, a conveyor for carrying two contacting pieces of stock between the punch and punch block, means for relatively moving the punch and punch block to cut one of the pieces of stock while the other acts as a backing, and means for reversing the pieces of stock so that the piece that formerly served as a backing may subsequently be cut.

12. In a machine of the class described, the combination of a punch, a movable carrier for said punch, a conveyor having a gripper mounted thereon for supporting two pieces of stock with their surfaces in contact and moving them into and out of operative relation to the punch in timed relation to the movement of the punch carrier, means to move the carrier to cause the punch to operate, and means to rotate the gripper through half a revolution after its removal from operative relation to the punch to reverse the position of the pieces of stock.

13. In a machine of the class described, the combination of a punch, a conveyor having a gripper mounted thereon for presenting

pairs of pieces of stock to the punch, means to operate said punch to cut through one of the pieces of stock held by said gripper, means to move said gripper from the punch, and means to rotate the gripper through half a revolution to reverse the position of the pieces of stock.

14. In a machine of the class described, the combination of an operating tool, a conveyor having a gripper mounted thereon for moving a piece of stock to and from the tool, and means to rotate the gripper through half a revolution to reverse the position of the piece of stock.

15. In a perforating machine, the combination of a punch, a conveyor having a gripper mounted thereon for moving pieces of stock to and from the punch, means to rotate the gripper through half a revolution to reverse the position of the pieces of stock, and an impositive latch tending to prevent said rotation of the gripper.

16. A machine of the class described having, in combination, a rotary conveyor having provision for movement in the line of its axis, a plurality of grippers, each having a pair of clamping jaws mounted on said conveyor for rotation about axes radially thereof, and means controlled by the movement of the conveyor in the line of its axis to move a clamping jaw of a gripper from clamping to releasing and from releasing to clamping position.

17. In a machine of the class described, the combination of a tool for operating upon pieces of stock, a support, a sleeve journaled therein, a gripper carried by the sleeve to transfer pieces of stock to and from the tool, and provided with a pair of pivoted clamping jaws, a latch arranged normally to maintain said sleeve and grippers in a determined relation to said tool, and means to rotate said sleeve and grippers through half a revolution to reverse the position of the pieces of stock.

18. In a machine of the class described, the combination of a tool for operating upon pieces of stock, a support, a sleeve journaled therein, a gripper carried by the sleeve to transfer pieces of stock to and from the tool and provided with a pair of pivoted clamping jaws, and an impositive latch arranged normally to maintain said sleeve and grippers in a determined relation to said tool.

19. In a perforating machine, the combination of a punch, a support, a sleeve journaled in said support and having a flat surface formed on a portion of its circumference, a gripper carried by said sleeve and operable to transfer pieces of stock to and from said punch, a shoe carried by said support in contacting relation with said sleeve, and means for yieldingly pressing said shoe against the flat surface of said sleeve im-

positively to hold said sleeve against rotation with respect to said support.

20. In a machine of the class described, the combination of a shaft, a conveyor supported for longitudinal and rotary movement therewith, a gripper mounted on said conveyor and provided with a movable clamping jaw, a plunger for moving said jaw, and a finger arranged to be operated by the longitudinal movement of the conveyor to press the plunger so that the latter moves said jaw from clamping position.

21. In a machine of the class described, a conveyor supported for longitudinal and rotary movement, a gripper mounted on said conveyor and provided with a movable clamping jaw, and a plunger arranged to move said jaw from clamping position upon the longitudinal movement of the conveyor.

22. In a machine of the class described, the combination of a punch provided with a reciprocable plunger, and a conveyor having a plurality of work holders for moving pieces of stock to and from punching position, said plunger and said conveyor being provided with co-operating cam surfaces to control the accurate positioning of the stock relatively to the punch.

23. In a machine of the class described, the combination of a punch provided with a reciprocable plunger, and a conveyor having a work holder for moving pieces of stock to and from punching position, said plunger and said conveyor being provided with means to control the accurate positioning of the stock relatively to the punch, and to prevent movement of the stock transversely of the punch during the operation of the latter.

24. In a machine of the class described, the combination of a gripper for holding two pieces of stock with their surfaces in contact, a cutting tool, means for moving the gripper to present the pieces of stock to the cutting tool, means for operating the cutting tool to cut through one of the pieces of stock and slightly into the other piece, means for rotating the gripper through half a revolution to reverse the position of the two pieces of stock, and means for removing from the gripper the piece of stock which has been cut through while leaving the other piece in the gripper.

25. In a machine of the class described, the combination of a gripper for holding two pieces of stock with their surfaces in contact, a cutting tool, means for moving the gripper to present the pieces of stock to the cutting tool, means for operating the cutting tool to cut through one of the pieces of stock and slightly into the other piece, means for rotating the gripper through half a revolution to reverse the position of the two pieces of stock, a suction grapple, and means for operating said suction grapple to transfer the piece of stock which has been

cut through from the gripper while leaving the other piece in the gripper.

26. A machine of the class described having, in combination, a main frame, a movable tool carrier mounted on said frame, means for moving said carrier, a tool arranged to be operated by the movement of said carrier, a plurality of grippers each comprising a pair of clamping jaws arranged to carry pieces of stock to and from said cutting tool and arranged so that while one gripper is presenting stock in operative relation to the cutting tool another gripper is in discharging position, and means controlled by the movement of said tool carrier for releasing one of the jaws of the last named gripper to permit the discharge of a piece of stock therefrom.

27. A machine of the class described having, in combination, a main frame, a tool carrier mounted for movement on said frame, means for operatively moving said carrier, a tool arranged to be operated by the movements of said carrier, a plurality of grippers each comprising a pair of clamping jaws arranged to carry pieces of stock to and from said cutting tool and arranged so that while one gripper is presenting stock in operative relation to the cutting tool another gripper is in discharging position, means controlled by the movement of said tool carrier for releasing one of the jaws of the last named gripper, and means for removing a piece of stock from said last named gripper.

28. A machine of the class described having, in combination, a cutting tool provided with a reciprocable plunger, a rotary conveyor, a plurality of grippers mounted on said conveyor each comprising a pair of pivoted clamping jaws, the jaws of the grippers having plungers movable to swing the jaws into and out of clamping relation, a spring for each plunger tending to hold that plunger in clamping position, a gripper loading station, a gripper unloading station, means for rotating said conveyor to present the grippers successively to the loading station, the cutting tool and the unloading station, and means controlled by the reciprocation of the plunger of said cutting tool for pressing a plunger of each gripper which at that time is at the loading station or at the unloading station against the action of its spring to swing a jaw of each said gripper out of clamping position.

29. A machine of the class described having, in combination, a cutting tool provided with a reciprocable plunger, a rotary conveyor, a plurality of grippers mounted on said conveyor for rotation about axes radial of said conveyor each comprising a pair of pivoted clamping jaws; the jaws of the grippers having plungers movable to swing the jaws into and out of clamp-

ing relation, a spring for each plunger tending to hold that plunger in clamping position, a gripper loading station, a gripper unloading station, means for rotating said conveyor to present the grippers successively to the loading station, the cutting tool and the unloading station, and means controlled by the reciprocation of the plunger of said cutting tool for pressing a plunger of each gripper which at that time is at the loading station or at the unloading station against the action of its spring to swing a jaw of each said gripper out of clamping position.

30. A machine of the class described having, in combination, a cutting tool provided with a reciprocable plunger, a rotary conveyor, a plurality of grippers, each comprising a pair of pivoted clamping jaws, mounted on said conveyor for rotation about axes radial of said conveyor, the jaws of the grippers having plungers movable to swing the jaws into and out of clamping relation, a spring for each plunger tending to hold that plunger in clamping position, a gripper loading station, a gripper unloading station, means located adjacent to the path of the conveyor between the cutting tool and one of said stations for rotating each gripper through half a revolution as it passes thereby, means for rotating said conveyor to present the grippers successively to the loading station, the cutting tool and the unloading station, and means controlled by the reciprocation of the plunger of said cutting tool for pressing a plunger of each gripper which at that time is at the loading station or at the unloading station against its spring to swing a jaw of each said gripper out of clamping position.

31. A machine of the class described having, in combination, a main frame, a plunger mounted for sliding movement with respect thereto, means for reciprocating said plunger, a cutting tool arranged opposite the plunger to be operated by the reciprocation of said plunger, a conveyor, and a plurality of grippers mounted on said conveyor, each comprising a pair of clamping jaws for carrying pieces of stock to and from said cutting tool and arranged so that while one gripper is presenting stock in operative relation to the cutting tool, another gripper is at a loading station.

32. A machine of the class described having, in combination, a main frame, a tool carrier mounted for operating movement with respect thereto, means for operating said carrier, a tool arranged to be operated by the movement of said carrier, a plurality of grippers each comprising a pair of clamping jaws for carrying pieces of stock to and from said tool and arranged so that while one gripper is presenting stock in operative relation to the tool, another gripper is at a

loading station, and means operating in timed relation to the movement of said tool carrier for releasing one of the jaws of the last named gripper at the loading station to permit the placing of a piece of stock on the other jaw thereof.

33. A machine of the class described having, in combination, a main frame, a plunger mounted for sliding movement with respect thereto, means for reciprocating said plunger, a cutting tool arranged to be operated by the reciprocation of said plunger, a plurality of grippers each comprising a pair of clamping jaws for carrying pieces of stock to and from said cutting tool and arranged so that while one gripper is presenting stock in operative relation to the cutting tool, another gripper is at a loading station, means controlled by the movement of said plunger for releasing one of the jaws of the last named gripper to permit the placing of a piece of stock on the other jaw thereof, and a gage at said loading station for positioning the stock relatively to the last named gripper jaw.

34. A machine of the class described having, in combination, a main frame, a plunger mounted for sliding movement with respect thereto, means for reciprocating said plunger, a cutting tool arranged to be operated by the reciprocation of said plunger, a plurality of grippers each comprising a pair of clamping jaws for carrying pieces of stock to and from said cutting tool and arranged so that while one gripper is presenting stock in operative relation to the cutting tool another gripper is in discharging position, means controlled by the movement of said plunger for releasing one of the jaws of the last named gripper, and a suction grapple for removing a piece of stock from said last named gripper.

35. In a machine of the class described, a relatively movable punch block and punch, a conveyor having fixed and movable jaws for gripping the work, means for actuating the conveyor to carry the work between the punch and punch block, and means operated by the relative movement of said punch block and punch for actuating said movable jaws.

36. In a perforating machine, the combination of an operating tool, a movable carrier therefor, a conveyor arranged to feed pieces of stock to and from the tool, a support for pieces of stock, a grapple, and mechanism arranged to move the tool carrier and to operate the grapple in timed relation therewith to transfer pieces of stock from the conveyor to the support.

37. In a machine of the class described, the combination of a perforating tool, a conveyor for carrying pieces of stock into and out of perforating position, a support for a pile of pieces of stock, and a suction

grapple arranged to transfer the pieces of stock from the conveyor to the support.

38. In a machine of the class described, the combination of a perforating tool, a conveyor, a gripper mounted thereon for carrying pieces of stock to and from the perforating tool, a support for a pile of pieces of stock, and means to transfer the pieces of stock from the gripper of the conveyor to the support.

39. In a machine of the class described, the combination of a perforating tool, a conveyor, a gripper mounted thereon for carrying pieces of stock to and from the perforating tool, a support for a pile of pieces of stock, and a suction grapple arranged to transfer the pieces of stock from the gripper of the conveyor to the support.

40. In a machine of the class described, the combination of a plunger, a support carried thereby, a one-way latch permitting the plunger to move downwardly but restraining it from upward movement, means tending to move the plunger upward against the resistance of said latch, a punch, and means to transfer stock from the punch to said support.

41. In a machine of the class described, the combination of a plunger, a support carried thereby, a one-way latch permitting the plunger to move downwardly but restraining it from upward movement, means tending to move the plunger upward against the resistance of said latch, a punch, and a grapple to transfer stock which has been operated upon by said punch to said support.

42. In a machine of the class described, the combination of a plunger, a support carried thereby, means tending to move the plunger upward, a punch, and a grapple to transfer stock which has been operated upon by said punch to said support.

43. In a machine of the class described, the combination of a suction grapple, a valve for controlling the suction of said grapple, means for moving said grapple to transfer stock carried thereby from one position to another, a lever for opening and closing said valve, and a member in the path of movement of a part moving with said grapple and operatively connected to said lever to open and close said valve in accordance with the position of said grapple.

44. In a machine of the class described, the combination of a conveyor for carrying pieces of stock in pairs from an operating mechanism to a discharge station, and suction mechanism operating on both sides of the pair of pieces to separate one of them from the other.

45. In a machine of the class described, mechanism for separating a pair of blanks held in surface contact comprising a suction device operating to hold one of the blanks against a support and a movable

suction device to carry the other blank away from the first.

46. The process of perforating which consists in placing a pair of blanks with their surfaces in contact, punching one blank while utilizing the second blank as a backing, reversing said second blank and then punching it.

47. The process of cutting sheet material, which consists in placing a plurality of sheets of material in a pile, and performing cutting operations upon the endmost sheets of the pile while utilizing as a cutting bed for each cutting operation the sheet adjacent to the end sheet upon which that cutting operation is being performed.

48. The process of cutting sheet material which comprises the steps of placing a plurality of sheets of material in a pile, cutting through one of the outside sheets of the pile while using the adjacent sheet as a cutting bed to receive the thrust of the cutter and subsequently cutting through the other outside sheet and using an adjacent sheet as a cutting bed.

49. The process of operating upon a plurality of sheets of material arranged in a pile which consists in presenting the pile of said sheets to an operating tool, causing said tool to operate upon one or more of the sheets and then reversing the pile of sheets for a further operation.

50. The process of operating upon a plurality of sheets of material arranged in a pile which consists in presenting said pile to an operating tool, causing said tool to operate on one or more of said sheets, removing from said pile the sheet or sheets which have been operated on by the tool, placing a sheet or sheets in the position occupied by those which have been removed, and returning the pile to the operating tool in position for the tool to operate upon a sheet constituting part of the original pile which was not operated upon by the said tool in the first operation.

51. The process of perforating which consists in positioning two pieces of stock back to back, operating a perforating tool to perforate one of said pieces while utilizing the other piece as a cutting bed, replacing the perforated piece with a fresh piece and presenting said pieces to the tool for operation upon that piece which first served as a cutting bed while the fresh piece now serves as a cutting bed.

52. In a machine of the class described, a relatively movable punch block and punch, a conveyor having relatively movable jaws for gripping the work, means for actuating the conveyor to carry the work between the punch and punch block, and means operated by the relative movement of the punch block and punch for causing relative movement of certain coacting jaws of said conveyor.

53. In a machine of the class described, a work conveyor movable to bring the work to a plurality of stations, a pair of work holding gripper jaws, means for movably supporting said gripper jaws on said conveyor constructed and arranged to allow movement of the gripper jaws toward and away from each other and to permit the position of said jaws to be interchanged so as to reverse the position of the work held by the jaws.

54. In a machine of the class described, a plurality of operating stations, a conveyor constructed and arranged to carry the work from one station to another, a pair of co-operating gripper jaws pivoted to said conveyor for movement toward and away from work held therebetween and means arranged to open one of said jaws at one station and another of said jaws at another station.

55. In a machine of the class described, a plurality of operating stations, a conveyor

constructed and arranged to carry the work from one station to another, a gripper head rotatably mounted on said conveyor, a pair of co-operating gripper jaws pivotally mounted on said head for movement toward and away from work held therebetween means for rotating said head to interchange the position of the work, and means for opening a jaw to receive or release the work.

56. In a machine of the class described, co-operating tool parts, and means for presenting work to said tool parts comprising a pair of co-operating gripper jaws pivotally mounted for movement toward and away from work held therebetween, and resilient means urging each jaw toward the other whereby the work is resiliently supported for receiving the action of the tool parts.

In testimony whereof I have signed my name to this specification.

FREDERICK M. FURBER.

Part of Defendants' Exhibit K.

**(Letters Patent No. 1,522,533 to T. C. Newman, et al.,
January 13, 1925.)**

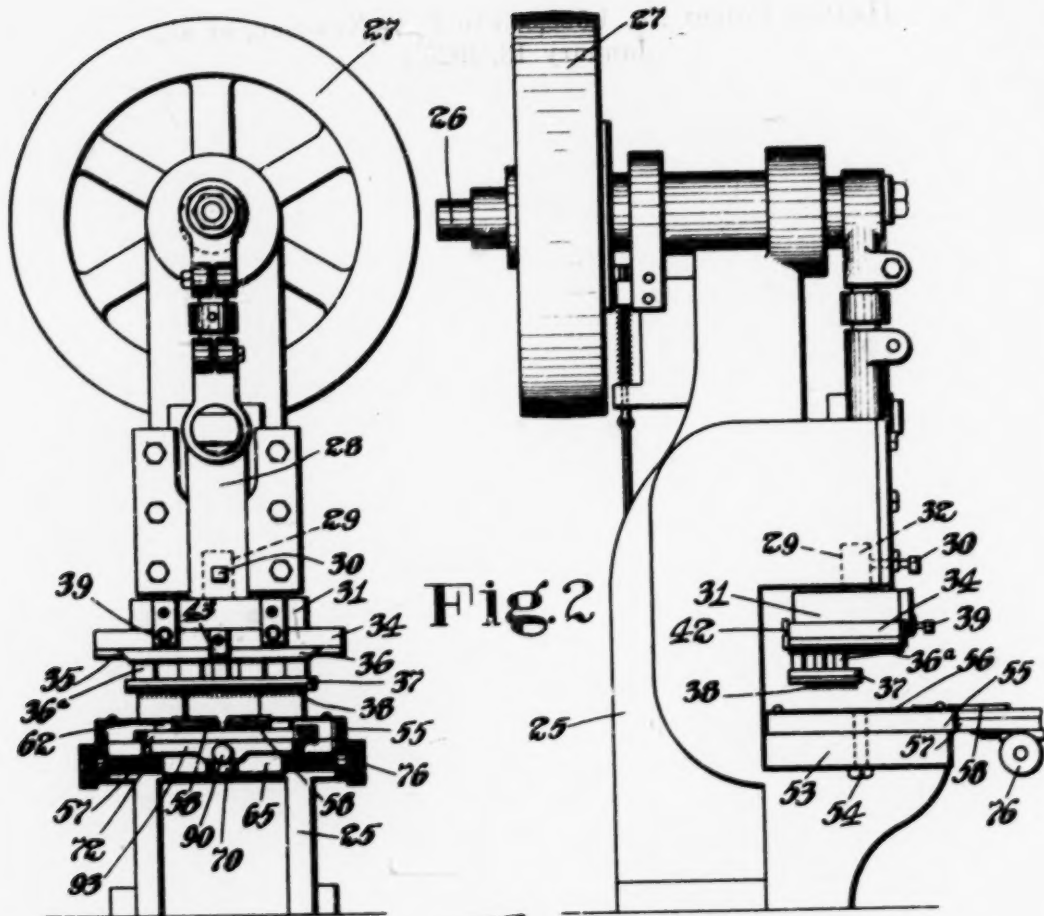


Fig 2

Fig 1

Fig 19

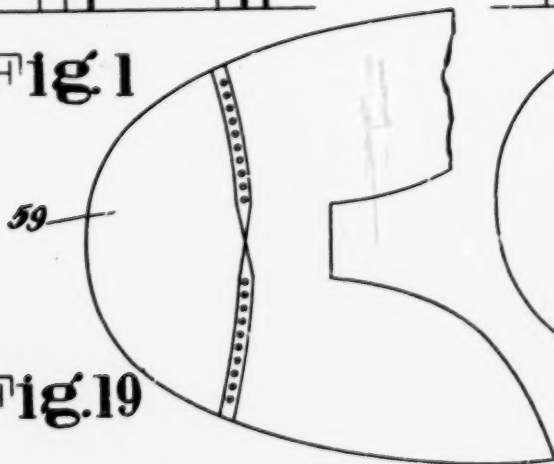
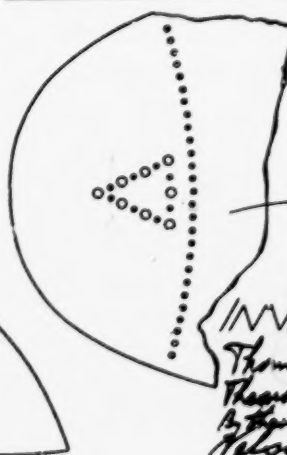


Fig 20



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 Theodor Brucher Richards
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 Nelson M. W. Wainwright

T. C. NEWMAN ET AL

VAMP PERFORATING MACHINE

Filed Sept. 25, 1920

6^a 4 Sheets-Sheet 2

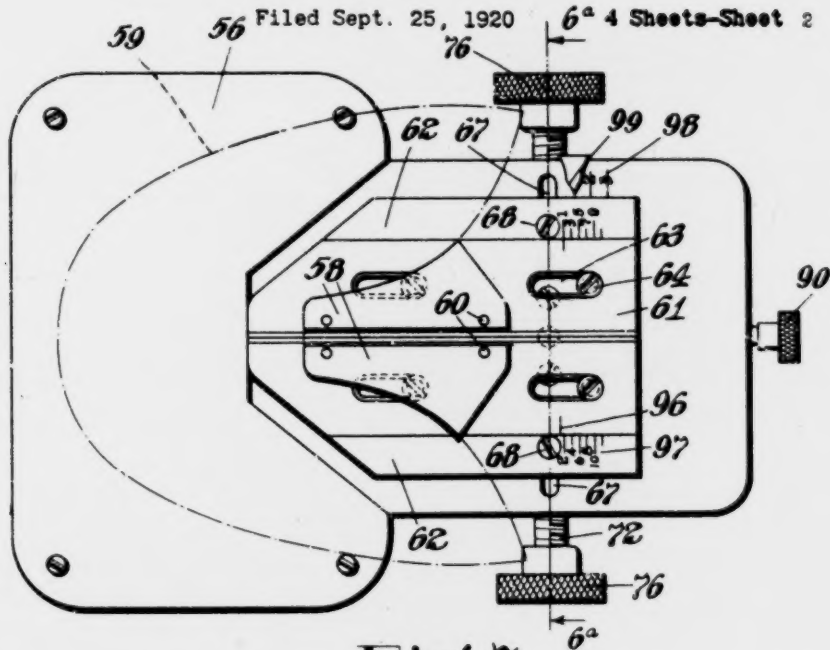


Fig. 3

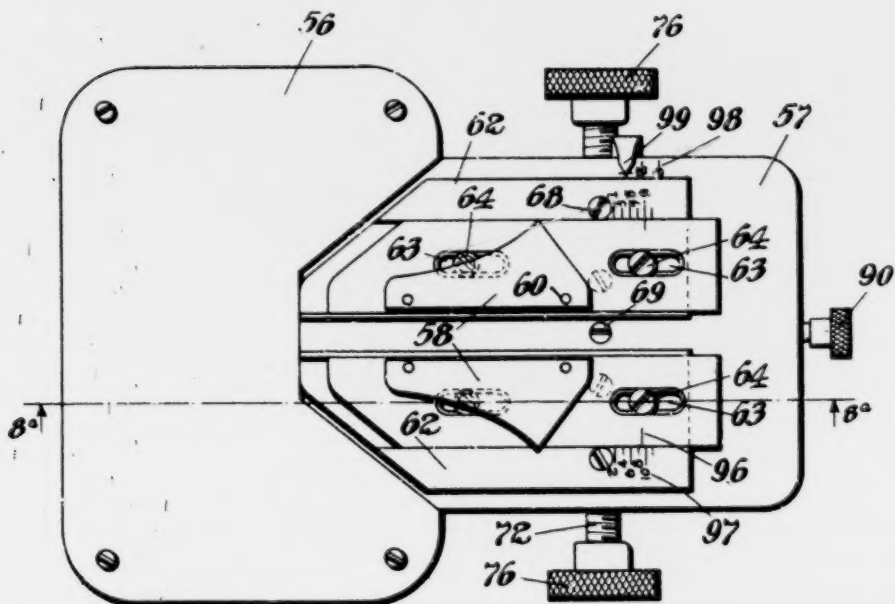


Fig. 4

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794 Jan. 13, 1925.

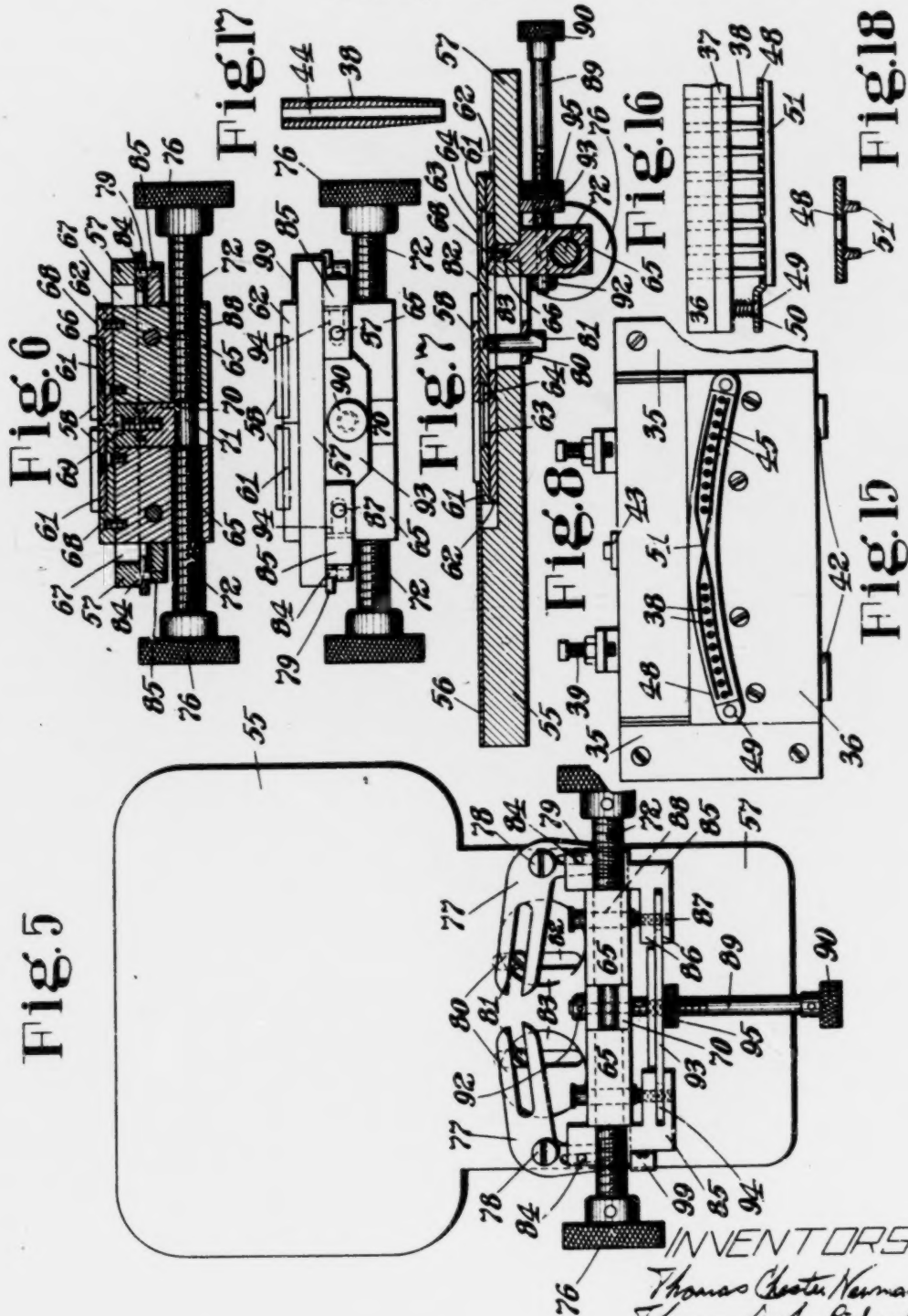
1,522,533

T. C. NEWMAN ET AL

VAMP PERFORATING MACHINE

Filed Sept. 25, 1920

4 Sheets-Sheet 3



INVENTORS
 Thomas Chester Newman
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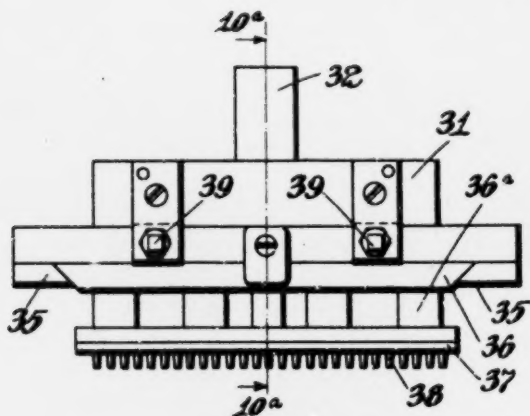


Fig. 9

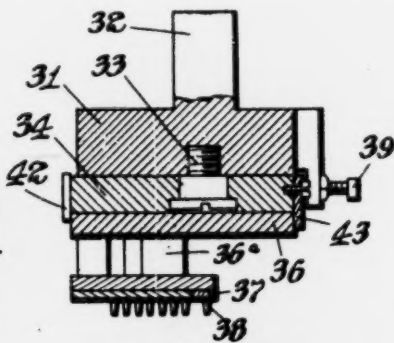


Fig. 10

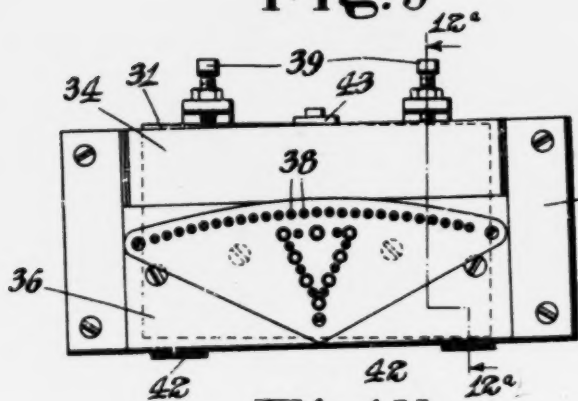


Fig. 11

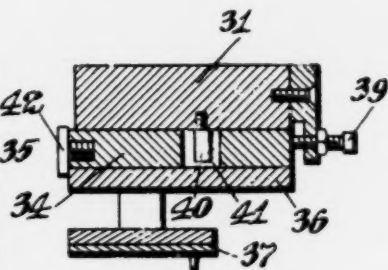


Fig. 12

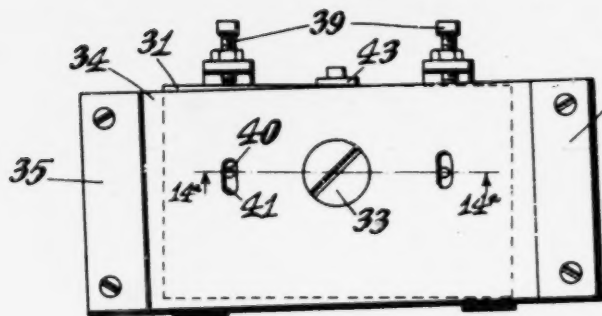


Fig. 13

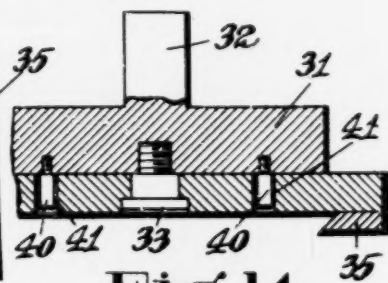


Fig. 14

INVENTORS

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 By their Attorney
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UNITED STATES PATENT OFFICE.

THOMAS CHESTER NEWMAN AND THEARON ARCHER RICHARDS, OF ROCHESTER, NEW YORK, ASSIGNORS TO UNITED SHOE MACHINERY CORPORATION, OF PATERSON, NEW JERSEY, A CORPORATION OF NEW JERSEY.

VAMP-PERFORATING MACHINE

Application filed September 25, 1920. Serial No. 412,667.

To all whom it may concern:

Be it known that we, THOMAS C. NEWMAN and THEARON A. RICHARDS, citizens of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented certain Improvements in Vamp-Perforating Machines, of which the following description, in connection with the accompanying drawings, is a specification, like reference characters on the drawings indicating like parts in the several figures.

This invention relates to machines for operating upon sheet material and for purposes of illustration is disclosed herein as embodied in a vamp perforating machine, this application being a continuation in part of our co-pending application Serial No. 295,349, filed May 7, 1919.

In the manufacture of boots and shoes, it is usual to ornament certain parts of the upper by punching designs therein by means of a gang punching machine. When it is desired so to use a pattern punch to ornament some of these parts, as the toe portion of a vamp or wing tip, difficulty is experienced in presenting the work to the machine in the proper symmetrical manner, especially since in machines commonly used for this work it is impossible to see that part of the stock to be operated upon after it has been placed in position to be punched.

For purposes of illustration, the problem of properly presenting a vamp to receive an ornamental punched pattern in its toe portion will be considered in some detail, though it is to be understood that the invention is in no way limited in its applicability to the punching of vamps.

The toe portions of vamps are not symmetrically cut on regular curves, and their outlines differ according as they are rights or lefts and according to their size. It frequently happens that there are used in a single factory vamps having several hundred different forms, the differences being due to differences in style as well as to the causes previously mentioned. This great variation practically precludes a successful use of edge gages engaging the forward or toe portions of the vamps. Moreover the

longitudinal position of the pattern to be punched varies, being given as a distance from the center of the throat of the vamp, and this renders still less feasible the use of edge gages contacting with the toe portions of the vamps.

An object of the present invention, accordingly, is to provide a satisfactory gage for positioning vamps to be operated upon and so constructed that its use shall be free from these and other difficulties, and so that it shall be capable of satisfactory use by unskilled or unintelligent operatives to present the work to the operating parts of the machine with such speed and certainty as will result in a large output of acceptable pieces of work with the perforating accurately placed. With this object in view a feature of the invention comprises a gage arranged to engage the throats of vamps to be perforated or otherwise ornamented and provided with novel adjusting means whereby the gage may be adjusted in two directions simultaneously so as to fit the throats of vamps of different sizes. Preferably the location of the gages with respect to the perforating or other ornamenting means in accordance with the sizes of the vamps is varied at the same time. As illustrated the gage consists of a pair of members constructed to engage the throats of vamps and arranged for simultaneous adjustment in a predetermined ratio longitudinally of a vamp support and in opposite directions transversely thereof, the ratio of the adjustments being such that as the gage members are moved longitudinally a distance equal to the difference in the desired distance of the perforation from the throat of the vamp in two different sizes, their position transversely will be simultaneously varied just enough to compensate for the difference in the widths of the throats of the two vamps. A scale may be provided on a suitable part of the machine, numbered to correspond to a suitable range of sizes and in co-operative relation to an index, the scale and index being so related that as the gage is adjusted the relative positions of the index and scale indicate the size of vamp corresponding to the adjustment of the gage. Thus the op-

erative may easily adjust the gage with precision in accordance with the size of vamp to be perforated.

In the ordinary run of shoes the ratio of the longitudinal to the transverse movement of the gage members necessary properly to position vamps of different sizes with respect to the perforating or other ornamenting means is constant. Under some circumstances, however, and with some styles of shoes, it may be desired to vary this ratio. With this point in view, a feature of the invention consists of means for varying the ratio of the longitudinal to the transverse movement of the gage members. In the illustrated embodiment of the invention a scale and indicator are provided in order that the operative may conveniently reproduce the desired ratio between these two movements.

When a vamp is to be provided with a line of perforations such as is known as an imitation tip, or with a medallion, it is frequently considered desirable to "angle" the perforation, that is, to position it with the portion thereof on the outer side of the shoe slightly rearward of the portion on the inner side. A feature of the invention, accordingly, consists of means whereby the relative position of the gage and a gang punch by which the vamp is to be perforated may be adjusted angularly about an axis perpendicular to the plane of the vamp through the small angle necessary to accomplish this purpose.

With these and other objects in view, the invention will now be described in connection with the accompanying drawings and pointed out in the claims.

In the drawings:

Fig. 1 is a front elevation of a punch press with the invention applied thereto;

Fig. 2 is a side elevation of the same;

Fig. 3 is a top plan view of the vamp support and gage;

Fig. 4 is a similar view with the parts of the gage in a different position of adjustment;

Fig. 5 is a bottom plan view of the vamp support showing parts of the gage;

Fig. 6 is a vertical section on the line 6^a—6^a of Fig. 3;

Fig. 7 is a rear elevation of the parts shown in Fig. 5;

Fig. 8 is a vertical longitudinal section on the line 8^a—8^a of Fig. 4;

Fig. 9 is a front elevation of the die block and die detached from the press;

Fig. 10 is a section of the same on the line 10^a—10^a of Fig. 9;

Fig. 11 is a bottom plan view of the die holder and die;

Fig. 12 is a section on the line 12^a—12^a of Fig. 11;

Fig. 13 is a bottom plan view of the die holder with the die detached;

Fig. 14 is a section on the line 14^a—14^a of Fig. 13;

Fig. 15 is a view similar to Fig. 11 of a different style of die;

Fig. 16 is an elevation of a portion of the die with the stripper and marker in section;

Fig. 17 is a longitudinal section, showing one of the die tools;

Fig. 18 is a transverse vertical section of the stripper and marker;

Figs. 19 and 20 show the work accomplished by the different styles of dies.

Similar reference numerals throughout the several views indicate the same parts.

For purposes of illustration the invention is shown as embodied in a punch or perforating machine, but it is to be understood that this embodiment is merely illustrative and the invention is not to be limited to the details of construction and operation shown and described. The invention is applicable to the usual forms of punch presses and is shown in the present instance in conjunction with a press having a frame 25 carrying a main shaft 26 driven by means of a pulley 27 and operating a ram 28, the latter being provided with a socket 29 and a set screw 30 for securing a die block to the ram. The present embodiment comprises, preferably, a die block or support 31 having a shank 32 (Fig. 9) and pivotally secured to the lower face of the block by means of a stud 33 (Fig. 10) is a die holder 34. The under face of the latter carries at its end undercut guides 35 which together form a wide dovetail groove or guide for receiving the correspondingly shaped die having an upper portion 36. Spaced, preferably, from the portion 36, by means of members 36^a, is a plate 37 forming the face of the die from which projects a series of cutting or punching tools 38 arranged according to the design which it is desired to cut in the toe portion of the vamp.

The die holder and die are together adjustably connected to the die block for the purposes explained hereafter, the die holder being pivoted on the central stud 33, which movement is limited in either direction by means of adjustable stops 39 suitably fixed to the die block (Figs. 9, 10, 11 and 12). To form a further limit to this movement of the parts, the die block also carries depending pins 40 (Figs. 12 and 13), the die holder having formed therein corresponding guide slots 41 in which the pins slide.

The upper portion 36 of the die is adjustably retained in the guide or groove of the die holder by screws 42 on the rear of the latter, each having a head overlapping the portion 36 and by a clip 43 engaging the forward side of the die portion 36 and secured by means of a screw to the die holder.

The cutting tools 38 are preferably hollow punches, as indicated at 44, Fig. 17, extend-

ing through plate 37, for the escape of the cuttings and are disposed on the die to form the desired design, such as an imitation tip or medallion with which the vamp is to be ornamented. One style of die is shown in Fig. 15 as having a line 45 of such punches, interrupted at its center. The cutting tools are preferably provided with a stripping plate of any suitable form such as that indicated at 48 (Figs. 15, 16 and 18) yieldably secured to the die as by means of a loose bearing on screws 49 fixed in the plate and interposed compression springs 50 on the screws. If it is desired to mark or score the vamp to serve as a guide for stitching adjacent to the perforations, or for other purposes, the stripper plate is preferably provided with projections 51 adapted to score the vamp, the resilient means supporting the stripper being sufficiently stiff to produce this effect as the stripper yields to permit the tools to project therethrough and cut the vamp. In Fig. 11 is shown a somewhat different style of die.

In the style of punching machine herein shown, the support for the vamp is fixed on the bed 53 of the press by means of bolts 54, Fig. 2, and as shown comprises a plate 55 having an upper surface 56 of material suitable for co-operation with the cutting tools without injury to the latter. The support 55 functions herein both as a vamp support and as a platen and has a reduced extension 57 carrying the vamp gage.

The gage comprises, as illustrated, a pair of plates 58 which, in the present instance, are rounded at their front ends and curved rearwardly at the sides where they engage the side edges of the vamp throat. These plates are designed to fit the throat of a vamp such, for example, as that indicated in broken lines at 59 in Fig. 3. They may, however, have any form determined by the style of vamp with which they are to be used. The plates are detachably secured, as by means of pins 60, to plates 61, respectively, these plates 61 being adapted to slide longitudinally or toward and from the die, in guideways in plates 62. To guide the plates 61 longitudinally in plates 62 and yet cause them to move transversely with the latter, there are provided guide slots 63 in the plates 61 engaged by screws 64 secured to the plates 62. To the bottom of each of the latter is fixed a lug 65 having a reduced upper portion 66 slidably fitting in a slot 67 extending transversely of plate 57, the lugs being secured to the plates by means of screws 68. Fixed to the center of plate 57, by means of a screw 69, in line with and between the lugs 65, is a stationary lug 70 having a transverse bore 71 in which is rotatably carried a spindle 72 formed with a recess to prevent endwise movement of the spindle in the lug. The spindle is

provided towards its respective ends with right and left hand threads engaging correspondingly threaded bores in the lugs 65 so that rotation of spindle 72, through its finger-pieces 76, serves to move lugs 65 toward or from each other in the slots 67 according to the direction in which the spindle is rotated. The lugs, of course, move the plates 62 secured thereto as well as the plates 61 and the gage plates 58 in the same manner, toward or from each other transversely of the gage, to contract or expand the gage, to fit the different vamps.

To accommodate vamps of different sizes, means is provided for adjusting the gage plates longitudinally of the vamp comprising, as illustrated, a pair of bell crank levers 77 (Figs. 5 and 7) fulcrumed at 78 to the under side of plate 57, each lever having a slotted arm 79 connected adjustably to the corresponding lug 65 and having also a slotted arm 80 engaging a pin 81 depending from the corresponding plate 61. Slots 82 are provided in the plates 62 to enable the pins 81 to move longitudinally when the plates 61 slide in their guideways in plates 62 and a pair of circular openings 83 are formed in plate 57 to enable the pins 81 and the plates 61 and 62 to have both transverse and longitudinal movement. The slotted arms 79 engage pins 84 rising from angular blocks 85 screwed to threaded guide pins 87 which slide in guide holes 88 in the lugs 65. The position of the pins 84 in the slots of the arms 79 determines the ratio of the longitudinal and transverse movements of the gage plates and this ratio may be changed as desired to suit the different systems of size measurement or variations in grade. The blocks 85 carrying the pins 84 are forked as indicated at 86, and, extending into these forks, are the slotted ends 94 of a bar 93 which can be adjusted by means of a screw rod 89. The screw rod 89 has a finger piece 90 at one end and at the other end is secured rotatably to the block 70 by a collar 92. The rod is threaded into the bar 93 so that rotation of the rod moves the bar and the angular blocks 85 to vary the position of these pins 84 in the slotted arms 79. A lock nut 95 may be used to fix the adjustment. It is evident that as the lugs 65 are adjusted outwardly, the plates 62 and 61 will be carried transversely, the reduced portions 66 of the lugs 65 moving in the slots 67 of the plate 57. Simultaneously, the angular blocks 85 and pins 84 are carried transversely and rotate the bell crank levers 77 on their pivots. This results in a longitudinal movement of the pins 81 in the slots 82 and causes the plates 61 to slide longitudinally in the guideways of the plates 62. The ratio of

the longitudinal and transverse movement may be conveniently indicated by a pointer 99 on the block 85 co-operating with a suitable scale 98 on the plate 57. Co-operating with scales 97 on plates 62, Fig. 4, are indices 96 on plates 61, indicating the adjustment for vamps of the usual series of sizes.

The operation of the device requires but a brief explanation in connection with the description of its construction. The rotation of spindle 72 is operative, through lugs 65, to adjust the two gage members 58 in opposite directions transversely of the machine, and the motion of lugs 65 is transmitted by levers 77 and pins 81 to move the two gage members 58 longitudinally both in the same direction, the longitudinal and transverse adjustment being in a predetermined ratio to accommodate and correctly to position different sizes of vamps. The gage having been adjusted for the size of the vamp to be operated upon, the die may be shifted slightly on the die block as described, accordingly as the vamp is a right or a left, to move the punches which are to perforate the vamp towards its outer edge, rearwardly longitudinally of the latter, and the tools on the other edge in the opposite direction where it is desired to "angle" the perforating to provide a compensation for the difference in adjustment of right and left vamps to the shoe, as well understood in the art. The press is then operated in the manner usual with machines of this type, causing the die to descend and perforate the vamp, the marking projections of the stripper plate, if such are used, scoring the vamp to indicate the proper lines for stitching, where the latter is to be employed.

The machine is simple and efficient in construction, being adapted for application economically to usual forms of punch presses and is especially advantageous in that it may combine in one machine for simultaneous operation, mechanism for "grading" or positioning the vamp, marking the latter, and cutting or punching out the design with which it is desired to ornament the vamp. Having thus described our invention, what we claim as new and desire to secure by Letters Patent of the United States is:

1. A vamp cutting press comprising a die having a series of punches arranged to cut openings forming a design for the toe of the vamp, a vamp support including an impression surface co-operating with the die, a vamp gage adjustable in two directions to fit the throats of vamps of different sizes, and a single means for simultaneously adjusting said gage in both directions.

2. A vamp cutting press comprising a punching die adapted to remove the material from a series of openings forming a design in the vamp, a vamp support includ-

ing an impression surface co-operating with the die, a vamp gage having a vamp engaging member and means for adjusting said member in a direction having components in a predetermined ratio longitudinally and transversely of the vamp to accommodate vamps of different sizes and to position the vamps with respect to the die according to the size of the vamp.

3. In a vamp grading and cutting machine, the combination with a punch press having a die and an impression member therefor, adapted to punch out a series of openings forming a design in the vamp, of a vamp gage comprising a pair of members and means for simultaneously and in a predetermined ratio adjusting said members in the same direction longitudinally of the vamp and in opposite directions transversely of the vamp for positioning vamps of different sizes with respect to said die.

4. In a vamp grading and cutting machine, the combination with a punch press having a die and an impression member therefor adapted to punch out a series of openings forming a design in the vamp, of a vamp gage comprising a part movable in one direction, a part movable in a transverse direction, and means for moving one of said parts and thereby effecting the movement of the other part for adjusting said gage to position vamps of various sizes relative to said die.

5. A punch press having a die adapted to punch a series of openings forming a design, a support including an impression surface for said die, and a vamp gage comprising a part movable in one direction, a part movable in a direction transverse with respect thereto, and means co-operating with each of said parts for moving one by the movement of the other, to position vamps of different sizes with respect to said die.

6. A punch press having a die adapted to punch a series of openings forming a design, a support including an impression surface for said die, and a vamp gage comprising a pair of parts movable in a predetermined direction, and means for simultaneously moving said parts in a direction transversely thereof and in a predetermined ratio thereto, to position vamps of various sizes with respect to said die.

7. A vamp punching press having a die adapted to punch a series of openings forming a design, and a vamp gage comprising parts having a movement in a predetermined direction and also in a direction transversely thereof for positioning vamps of different sizes relative to the die, said die being mounted for shifting movement to vary the position of the design on the vamp.

8. A combined vamp grading and marking machine comprising a power operated press having a die block, a die on said

block adapted to score the vamp, said die being adjustably mounted with respect to said block so as to be capable of having a shifting movement on said block to vary its position relative to the vamp, a vamp support on said press, and a vamp gage adjustable longitudinally and transversely of said vamp support in a predetermined ratio for positioning vamps of different sizes with respect to said die.

9. A machine for operating upon vamps, having a work support, a member guided for movement longitudinally of said work support, a second member guided for movement transversely of said work support, means to move said members in a predetermined ratio, one longitudinally and the other transversely of said work support, a vamp gage carried by said members and adjustable by them in said predetermined ratio longitudinally and transversely of said work support.

10. A machine for operating upon vamps, having a pair of gage members arranged to engage the throat of a vamp, a first pair of supports for said gage members, a second pair of supports for said first pair of supports, and means for simultaneously adjusting in a predetermined ratio one pair of said supports lengthwise of the vamp and the members of the other pair of said supports in opposite directions transversely of the vamp to accommodate different sizes of vamps.

11. A machine for operating upon vamps, having a pair of gage members arranged to engage the throat of a vamp, a pair of supports for said gage members, and means for simultaneously moving said supports in opposite directions transversely of the vamp and for moving said gage members longitudinally of the vamp.

12. A machine for operating upon vamps, having in combination, a pair of gage members arranged to engage the throat of a vamp, and means having a pair of screw threaded parts for simultaneously moving said gage members in a predetermined ratio longitudinally of the vamp and in opposite directions transversely of the vamp.

13. A machine for operating upon vamps, having in combination, a pair of gage members arranged to engage the throat of a vamp, a rod provided with screw threaded portions arranged by its rotation to move said gage members transversely of the vamp simultaneously and in opposite directions, and means operated through the rotation of said rod to move the gage members longitudinally of the vamp in a predetermined ratio to their transverse movement.

14. In a machine for perforating vamps, in combination, a gang punch and a gage for positioning vamps with respect thereto,

said gage being provided with a pair of members formed and arranged to co-operate with the throat of the vamp for positioning the latter with respect to the punch, and means for adjusting said members in a predetermined ratio towards one another and forwardly with respect to the vamp or away from one another and rearwardly with respect to the vamp in accordance with the size of the vamp and to vary the position of the perforating according to the size of the vamp.

15. In a vamp perforating machine, the combination of a die for punching a design in the vamp, and a vamp gage comprising relatively movable parts having adjustment in predetermined ratio longitudinally and transversely of the vamp to accommodate different sizes of vamps.

16. In a vamp perforating machine, the combination of a die for punching a design in the vamp, and a vamp gage comprising a supporting plate adjustable transversely of the vamp and a gage plate adjustable on the supporting plate longitudinally, in a predetermined ratio to the transverse adjustment.

17. In a vamp perforating machine, the combination of a die for punching a design in the vamp, and vamp gage plates oppositely adjustable transversely of the vamp and simultaneously adjustable longitudinally.

18. In a vamp perforating machine, the combination of a die adapted to punch a series of openings forming a design in a vamp, a vamp gage having a vamp engaging member, means for adjusting said member in a direction having components in a predetermined ratio longitudinally and transversely of the vamp to accommodate vamps of different sizes, and means to vary the ratio of said components.

19. In a vamp perforating machine, the combination of a die adapted to punch a series of openings forming a design, and a vamp gage comprising a part movable in one direction and a part movable in another direction, means for moving the parts in a predetermined ratio or in a variably predetermined ratio.

20. In a vamp perforating machine, the combination of a die adapted to punch a design in a vamp, a vamp gage comprising parts movable together transversely of the vamp, means for moving one part longitudinally of the other part, and means for variably determining the ratio of the two movements.

21. In a vamp perforating machine, the combination of a die for punching a design in a vamp, a pair of gage members arranged to engage the throat of a vamp, a pair of supports for said gage members, means for simultaneously moving said supports in op-

posite directions transversely of the vamp, and for moving said gage members longitudinally of the vamp, and means for variably fixing the ratio of the longitudinal and transverse movements.

22. In a vamp perforating machine, the combination of a die for punching a design, a pair of gage members arranged to engage the throat of a vamp, a pair of supports for said gage members, means for moving said supports in opposite directions transversely of the vamp, means including bell crank levers for moving said gage members longitudinally on the supports, and adjustable connections between the bell crank levers and the supports to vary the ratio of the longitudinal and transverse movements.

23. In a machine for operating upon vamps, a vamp gage comprising a supporting plate adjustable transversely of the vamp, a gage plate adjustable longitudinally of the vamp, and means for variably predetermining the ratio of the longitudinal and transverse movement of the plates.

24. In a perforating machine, a support, a gang punch comprising a plurality of punch members arranged according to a fixed pattern pivotally carried as an entirety thereby, and means to hold said gang punch in different adjusted positions.

25. In a perforating machine, a support, a die holder carried thereby for pivotal adjustment with respect thereto, a gang punch comprising a plurality of punch members arranged according to a fixed pattern carried by said die holder, and stop mechanism to retain said die holder in different adjusted positions.

26. In a machine for perforating vamps, a gang punch comprising a plurality of punch members arranged according to a fixed pattern, and means for adjustably supporting said gang punch as a unit constructed and arranged so that the perforation of the vamps may be angled according as the vamps are rights or lefts.

27. In a vamp perforating machine, a gang punch, a vamp gage, and means constructed and arranged to set the punch and

gage at an angle to each other to place the perforations at an angle to the vamp center line.

28. In a machine for operating upon vamps, a vamp gage comprising a pair of supports, means for moving said supports in opposite directions along a fixed path, a pair of gage members arranged to engage the throat of a vamp, said gage members being slidably mounted upon said supports for movement in a fixed path at an angle to the path of movement of the support, and means for controlling the movement of said gage members upon said supports.

29. In a machine for operating upon vamps, a vamp gage comprising a pair of supporting members mounted for movement toward and away from each other along a fixed path, a pair of gage members arranged to engage the throat of a vamp, each of said gage members being slidably mounted upon one of said supports for movement in a path substantially at right angles to the path of movement of the supports, and means for moving said supports toward and away from each other and simultaneously moving said gage members on the supports.

30. In a machine for operating upon vamps, a vamp gage comprising a pair of supporting members mounted for movement toward and away from each other along a fixed path, a pair of gage members arranged to engage the throat of a vamp, each of said gage members being slidably mounted upon one of said supports for movement in a path substantially at right angles to the path of movement of the supports, means for moving said supports toward and away from each other and simultaneously moving the gage members on the supports, and adjustable means for fixing the ratio of the movement of the gage members to the movement of the supports.

In testimony whereof we have signed our names to this specification.

THOMAS CHESTER NEWMAN.
THEARON ARCHER RICHARDS

[fol. 611] Mr. Allen: Those patents not pleaded, from your list I got as Leavitt, Osswald, Mayo and a new Knight.

Mr. Kingsland: I think that [it] correct. In any event, they are all in to show the state of the art, and to elucidate the reference thereto by the Court of Appeals in the First Circuit.

Mr. C. Russell Riordon (Plaintiffs' Expert): May I ask if those patents which are now set up in the answer and not listed here are being dropped?

Mr. Kingsland: Well, we are not introducing them, and there will be no reliance made to show the state of the art beyond what we have included in this volume.

Q. 45. Now, when I interrupted to make that offer, I believe you were considering the Newton Patent of the group. Proceed with your answer in your own way.

A. Broadly considered, the patent to Newton discloses all the corresponding elements of the Freeman machine, except the adaptability of the Newton work support to support a fitted upper with a portion flatwise upon the stripper plate and another portion tucked out of the way [fol. 612] beneath the level of the stripper plate. The Court of Appeals for the Fourth, Fifth, or First Circuit stated that there was no invention to constructing the work support to support a fitted upper in such position, and, therefore, in my opinion, in effect, the Court of Appeals of the First Circuit held that it would not involve invention to construct the Newton work support to support a fitted upper in the position stated by me. In consequence, in my opinion, many claims, such as claim 9, 24, 25, 26, 45, 47, 48, 49, 51, 54, 55, 56, 58, 59, 60, 89, 90, 91, are not definitely distinguishable from the claims disclaimed, particularly such claims as claims 6, 7, 8, and 9.

The Court: Those claims you just mentioned—6, 7, 8, and 9—of the Reissue Patent?

The Witness: No, Your Honor.

The Court: (Q.) Or of the new patent?

A. No. Of the original Freeman Patent. I should have said that.

The Court: All right.

The Witness: (Addressing the reporter) Will you add to my last sentence: of the Freeman original patent 1,681,033?

Those are not all the claims of those retained in the Freeman Patent that I consider are not definitely distinguishable from claims disclaimed, but it seems to me those [fol. 613] that I have referred to particularly are sufficient at this time.

Q. 46. Now, I wish you would turn to the Reissue Patent No. 20,202 and apply the claims separately, pointing out their construction, and also in doing that, their application to the accused structure or differentiation from the accused structures.

A. Referring first to claim 6, one of the claims held valid by the Circuit Court of Appeals for the First Circuit, for an improvement in particular manner, which recites:

“In combination with a cutting die having cutting edges for cutting designs in shoe upper material, a support for the die and a mask cooperating therewith, said mask being provided with one or more edge portions to partially surround the cutting edges of the die, said edge or edge portions shaped to act as a gauge for the positioning of the material beneath the mask.”

In accordance with the interpretation impressed upon that claim by the Circuit Court of Appeals for the First Circuit, the mask recited in claim 6 of Reissue No. 20,202 must have a window of a shape and size corresponding to the stitched patterns of the ornamentalations with which the work is to be provided. In addition to the window completely surrounding the area to be perforated, the window [fol. 614] must have one or more edge portions to partially surround the cutting edge of the die, said edge or edge portions shaped to act as a gauge for positioning of the material beneath the mask.

Claim 8, which is claim 70 in the original patent to Freeman, was also construed by the Circuit Court of Appeals for the First Circuit, as different from claim 6, in that the window which completely surrounds the stitched

pattern of perforations provides that the entire edge of the window shall be the gauge portion.

Claim 9 of Reissue No. 20,202, which is claim 81 of the original patent to Freeman, was also construed by the Circuit Court of Appeals of the First Circuit, differs from claims 6 and 8 of Reissue No. 20,202, in that an edge of the opening in the window may act as a gauge without either surrounding the entire area of the stitched pattern of ornamentations and need not extend partially around the cutting edges of the die.

Claim 7 of Reissue No. 20,202, which corresponds to claim 19 of the original Freeman Patent, is directed to a support for shoe upper material and a clamping member cooperating therewith constructed and arranged to provide a preliminary yielding engagement permitting adjustment of the material, and subsequently a firm holding engagement therewith. This language is directed to the Freeman [fol. 615] clamping member, which is constructed to rest upon the work under its own weight while the underlying piece of work is adjusted upon, over the cutting edge of the die, the frictional engagement with the work being sufficient to hold the work in the position to which the operator has adjusted it sufficiently to allow his hands to leave the work and engage the front edge of the clamping plate to provide a firm holding engagement.

So far as claims 1, 2, 3, 4, and 5 of Reissue No. 20,202 are concerned, they are new claims presented for the first time in the Reissue Patent No. 21,202. The Circuit Court of Appeals for the First Circuit said that the mere use of a window in the clamp or of a straight curved edge in or connected with the clamp for gauging purposes did not involve invention, in view of the prior art. Stated another way, to distinguish from the prior art, the Freeman mask must have a certain construction and must both clamp the work and provide a ready means for the gauging of the work.

In my opinion, claims 3 and 4 of Reissue No. 20,202 stop short of reciting elements which distinguish from the prior art in the manner required by the decision of the Circuit Court of Appeals for the First Circuit. For instance, claim 3 calls for clamping means, said clamping means

[fol. 616] constructed to hold a portion of the work and substantially surround the ornamenting means with its opening shaped to correspond with portions of the shoe upper design. This claim does not bring out clearly the fact that the clamping means also serves as a gauge. In any event, the construction of the clamping means and if it also serves as a gauge must be that impressed upon the clamping construction and gauging construction impressed upon the Freeman invention by the decision of the Circuit Court of Appeals for the First Circuit. In my opinion, when claim 1 of the Reissue Patent No. 20,202 recites a mask, that mask, in order to give validity or give meaning to the claim, must have a construction impressed upon the Freeman mask by the Circuit Court of Appeals for the First Circuit. Claim 1 calls for an upper gauging mask, claim 2 for a clamping mask, claim 3 for a clamping means, claim 4 for a clamping mask, claim [—] for a clamping mask, and it is my understanding that it is impossible to understand the construction claimed by these five claims without reference to the decision of the Circuit Court of Appeals for the First Circuit, which requires that the clamping mask or gauging mask must have a window of a shape and size corresponding to the stitched pattern of the decorations, and that as a further description of this window, one which must act as a gauge in connection with the [fol. 617] stitched pattern of [preforations]. Applying these claims to the accused structures, commencing with Exhibit No. 1, I find that Plaintiffs' Exhibit No. 1 has a support, an ornamenting die on the support, and means for stripping a shoe upper from the ornamenting means. I do not find, however, an upper gauging mask having a window of a size and shape corresponding to the stitched pattern of the decorations which are to be perforated, and I do not find any positioning indicating means in that mask shaped to correspond in proportions of any of the permanent or fixed shoe upper design. There is now work here before me, but as I understood Mr. Altvater's testimony with respect to the work, which is used with this die, Plaintiffs' Exhibit No. 1, the gauging means cooperates with ink marks upon the face of the upper, an operation which in my opinion is excluded specifically as a feature of the Freeman invention, not only by Freeman in his original patent and in the specification of the Reissue Pat-

ent No. 20,202, but by the Circuit Court of Appeals for the First Circuit.

The Court: We will stop at this point.

At this point, a recess was had until 2:00 o'clock P. M.

After recess, at 2:00 o'clock P. M., on February 8, 1940, the following proceedings were had:

[fol. 618] The Court: Proceed.

Direct Examination Resumed.

By Mr. Kingsland:

Q. 47. Will you proceed with your answer, Mr. McDermott?

A. In view of the fact that I said something about claim 6 of No. 20,202 yesterday, and some of the other claims today, I am somewhat confused as to whether or not I have covered the complete ground with respect to the relationship of the response of claims 1 to 9, both inclusive, of Reissue No. 20,202 to the five accused structures, Plaintiffs' Exhibits Nos. 1 to 5, inclusive. So far as claims 1, 2, 3, 4, 5, 6, 8, and 9 are concerned, each and every one require at least that the window in the mask completely inclose the stitched pattern ornamentations and correspond with it, namely, the stitched pattern, in size and shape. In addition, claims 1, 2, 3, 4, 5, 6, 8, and 9 probably include some form of gauging means connected with the window, but if so, this gauging means must cooperate with a stitched pattern of perforations formed on the work itself. I have examined all the accused structures, Plaintiffs' Exhibits Nos. 1 to 5, inclusive, together with the various pieces of work said to be characteristic of the work which the dies are—various dies are to operate upon, respectively, and I [fol. 619] find that not one of the claims in Reissue Patent No. 20,202 find response in any one of Plaintiffs' Exhibits 1 to 5, inclusive. That is, they, each of them, do not employ a window completely inclosing a stitched pattern of perforations. Moreover, not one of these five dies has a gauge which cooperates with a stitched pattern of ornamentation on the upper. Each of the pieces of work dis-

close that marking lines have been formed on the upper, in order to form a basis for a gauging action of the die itself.

Mr. Allen: I wonder what pieces.

The Witness: Each of the pieces of work which have been offered in evidence as characteristic of the pieces of work operated by Plaintiffs' dies, Exhibits Nos. 1 to 5, inclusive.

Mr. Allen: (Q.) Defendants' dies, 1 to 5?

The Witness: No. Plaintiffs'.

Mr. Allen: Our exhibit of their dies.

The Witness: I stand corrected. The dies, Plaintiffs' Exhibits Nos. 1 to 5, inclusive. All these pieces of work show marks placed upon the upper for the purpose of allowing some part of the die to conform with them, so that there may be a gauging action. These ink lines constitute no permanent or fixed part of the shoe and are either covered up or are removed from the upper as the [fol. 620] ornamentalations are cut into the upper by the various dies.

With respect to claim 7 of Reissue No. 20,202, Plaintiffs' Exhibit No. 1 discloses a clamp gauge, but it is designed to move from an extreme operating position to an extreme clamping position in a single stroke, and in my opinion does not provide a preliminary yielding engagement permitting adjustment of the material and subsequently a firm holding engagement therewith. The die, Plaintiffs' Exhibit No. 2, is an elevated gauge die and performs no clamping function upon the work whatsoever.

I have examined Plaintiffs' Exhibits—pardon me, Mr. Allen—do you call that 3-A or 3 now?

Mr. Allen: 3-A will be satisfactory.

Mr. Kingsland: 3-A.

The Witness: Plaintiffs' Exhibits 3-A, 4, and 5, respectively, and I cannot see any one finds response to claim 7 of the Reissue Patent No. 20,202. In fact, I can find no claim in the Freeman Reissue Patent No. 20,202 that finds response in any one of Plaintiffs' Exhibits Nos. 1 to 5, respectively.

[fol. 621]

Cross Examination.

By Mr. Allen:

XQ. 1. Now, with regard to the shoe upper, Exhibit No. 34, please examine the ink mark line on that piece of upper. A. I have.

XQ. 2. Also, will you please examine the completed upper, Exhibit No. 36?

(The witness examines the said exhibit.)

XQ. 3. Will you state whether or not the ink mark line is not a line ascribed on the upper, Exhibit No. 34, to indicate where the stitches are to come in Exhibit No. 36? You can even see some of the chalk line left.

[fol. 622] A. Apparently do.

XQ. 4. All right. Now then, so far as concerns gauging the piece of work, Exhibit No. 34, in the die, Exhibit No. 1, by means of the ink mark line, tell us the structural differences that you find between that in gauging to the line after stitches have been placed on that line, do you find any? A. Yes. Considerable.

XQ. 5. What are they?

A. Well, you have got a—(the witness pauses)—you have got more of an edge to locate against with the stitches than you do with the ink marks.

XQ. 6. They are flush, aren't they, with the leather?

A. Not sufficiently, no.

XQ. 7. Well, they are substantially flush with the leather?

A. Well, I would not say so. Then again the lines, the stitching lines are continuous and the ink marks are broken.

XQ. 8. Does that make any difference, do you think, to an operator in gauging the two pieces of work?

A. An important difference.

XQ. 9. Yes. Tell me this, Mr. McDermott: Wouldn't an operator that gauged the piece of work, Exhibit No. 34, using the ink marks, get it in just the same place as one who would gauge Exhibit No. 36, after stitches had been placed where those ink marks were?

[fol. 623] A. That would be purely an estimation on my part, but certainly—

XQ. 10. (Interrupting) You are not skilled in the matter of locating pieces of work in dies in this way?

A. No, I am not.

XQ. 11. I see. You may sit down, as far as I am concerned.

A. Well, you will have me up again, so I might as well stand.

XQ. 12. All right. Now, you have construed claim 6 of the Reissue Patent No. 20,202 several times during your testimony. I wish you would look at Plaintiffs' Exhibit No. 15, which is a Model T Die, with a mask on, and state whether, in your opinion, that die comes under claim 6 of the Reissue Letters Patent? A. Definitely not.

XQ. 13. I see. Have you read the decision with regard to the Freeman Patent, which included claim 18, in the Court of Appeals of the Eighth Circuit? A. I have.

XQ. 14. And did the Court of Appeals of the Eighth Circuit state that this die was an infringement of those claims, including claim 18? A. I believe they did.

XQ. 15. And claim 18 is the same as claim 6?
[fol. 624] A. No, it is not.

XQ. 16. What is the difference between claim 18 and claim 6, I mean in words or copies?

A. We are not dealing with words.

XQ. 17. Well, what I am doing is dealing with words.

A. Well, I am dealing with claim 6 as especially amended by the Circuit Court of Appeals of the First Circuit.

XQ. 18. I see. Now, the assumption being that while you were in the Eighth Circuit, a defendant in the Eighth Circuit Court of Appeals, the First Circuit Court of Appeals is going to change the opinion of the Eighth Circuit. Have you any basis for that? It is a rhetorical question; you need not answer it.

Mr. Kingsland: Now, if the Court please, that is not a proper question.

Mr. Allen: No, it is a rhetorical question.

Mr. Kingsland: Yes.

Mr. Allen: You need not answer it, although I would like it to remain in the record.

XQ. 19. Now, I want to get this, Mr. McDermott: You have not, in your testimony, in any way attempted to express your own opinions in connection with the Freeman invention, apart from your adoption and construction of

language of the decision of the Court of Appeals of the [fol. 625] First Circuit, have you?

A. I certainly tried not to.

XQ. 20. I see. And so this Court does not have the benefit of your independent opinion as an expert, from the point of view of the reasons for and the operation of the structures of the Freeman device? A. Yes.

XQ. 21. He does? A. I hope that he does.

XQ. 22. All right. But yet you just told me that you were basing your opinion and did the best you could to base it solely on the decision of the Court of Appeals of the First Circuit, rather than on your own independent judgment.

A. Why, I have no right to form an independent judgment, unless I have some fact to base an opinion upon.

XQ. 23. All right. Now then, basing your opinion upon the fact that you are an expert in shoe parts, shoe machinery, have been an Examiner in the Patent Office, and are here to aid this Court in connection with matters having to do with the shoe art, you have not attempted to do that at all, have you?

A. I did not consider that I have any right to do so.

XQ. 24. So then your testimony has been only in telling the Court what your construction is of the patents involved here, taken together with your idea of what the Court of Appeals meant in its opinion in the First Circuit? [fol. 626] A. Not entirely that. I don't think you worded that question quite right.

Mr. Allen: Well, perhaps—read the question.

(The question was repeated by the reporter.)

The Witness: Was not my construction that I testified about. It was the construction impressed upon the claims by the Circuit Court of Appeals for the First Circuit.

Mr. Allen: Mr. Reporter, will you now turn back to the place that I asked you to mark first during yesterday's testimony?

(The following question and answer were thereupon read by the reporter:

“Q. With respect to the significance of the term ornamentation, as you derive it from the opinion of

the Court of Appeals, from the fact standpoint, that is, ornamentation of the shoe, what do you understand that to be?"

"A. Why, I understand your ornamentations to be the openings cut through the work by the cutting edges of the die.")

XQ. 25. Do you wish to change that opinion? A. No.

XQ. 26. Now, the Court of Appeals said, in the passage which I think the record will show was being discussed, [fol. 627] 'referring to claim 70, construing this as referring to an opening so conforming to the size, shape and position of the ornamentation. Now then, I think your testimony was that ornamentation meant the holes that were punched in the work. A. No, not at all.

Mr. Allen: (Addressing the reporter) Read what he said now, again, back over here.

(The answer was again repeated by the reporter, as follows:

"A. Why, I understand your ornamentations to be the openings cut through the work by the cutting edges of the die.")

The Witness: My testimony was to the effect that the ornamentations referred to by you in your last question were those cut in the work. I understand I was asked the question--

XQ. 27. Just a minute. Let's go back to your old testimony and read the question before it then.

(Thereupon the reporter read the question, as follows:

"With respect to the significance of the term ornamentation, as you derive it from the opinion of the Court of Appeals, from the fact standpoint, that is, ornamentation of the shoe, what do you understand that to be?"

[fol. 628] And the last portion of the witness' answer next preceding the question just read, was then read by the reporter as follows:

"As a further limitation of the window, a portion

of the edge of the window must be shaped as a gauge with respect to the pattern of ornamentation.")

Mr. Allen: (Addressing the reporter) Now then, the question which you read a moment ago.

(The question was again repeated by the reporter as follows:

"With respect to the significance of the term ornamentation, as you derive it from the opinion of the Court of Appeals, from the fact standpoint, that is, ornamentation of the shoe, what do you understand that to be?")

XQ. 28. Now you just heard what the reporter read from your testimony immediately preceding that question, did you not? A. Yes.

XQ. 29. Now, you say that in your answer where you said the ornamentation meant the holes were going to be cut, that was not with reference to that particular passage which you have just been quoting?

A. There is a distinction between ornamentations and [fol 529] pattern of ornamentations, and I was trying to make that clear. The pattern of ornamentations is the stitch pattern. The ornamentations are the holes cut into the work after the pattern of ornamentations has been used as a gauge.

XQ. 30. Now, I want to read you from the Court of Appeals' decision. It says:

"Construing this"—

That is to say, the shape of the opening.

"Construing this as referring to an opening so conforming to the size, shape, and position of the ornamentation"—

Now, it does not say "pattern of ornamentation" there, does it? It just says "ornamentation". Now, that, in your opinion means the holes?

A. No. The pattern of ornamentation.

XQ. 31. It does not say "the pattern of ornamentation", does it?

A. I know it does not, and I explained why I call that

the pattern of ornamentation, because at the time that they are talking about, the ornamentations are not placed in the work, and so, therefore, "ornamentation" is a misnomer and must mean pattern of ornamentations.

XQ. 32. Now then, I think you went further and said that your understanding of "pattern of ornamentations" [fol. 630] meant the little stitches that were made around the individual holes in one of these cut-out shoes.

A. That is as I understand it.

XQ. 33. Not some general panel that lay outside of the whole assembly of holes, but little stitches that went around each hole.

A. That is what I understand from the Court of Appeals decision, yes.

XQ. 34. Well, let's look at the Freeman Patent, itself. You will find a showing in figures 11 and, I think, 14, of a piece of work being gauged. Now, Figure 11 and Figure 16. A. May I have a copy. I have loaned my copy.

(Mr. Allen hands a printed copy to the witness.)

XQ. 35. ~~Look~~ at those two figures. A. Yes, I have.

XQ. 36. Well, take Figure 11. Now, where is the stitching surrounding the holes generally, marked 75 there?

A. Figure 11 does not show the Freeman clamp in the manner that showing was judicially amended by the Circuit Court of Appeals for the First Circuit.

XQ. 37. Well, look at Figure 16 then, that is your same view. A. Same answer.

XQ. 38. You don't find any other picture of any gauging [fol. 631] there, do you, in the patent?

A. Only generally in Figures 1 and 2 which shows elevations.

XQ. 39. Now I call your attention to line 116, page 6 of the patent, which refers to the parts shown in these figures, and I will read you:

"To facilitate the correct positioning of the upper on the cutting anvil 67, the contour of the opening 80, or certain portions of such contour, correspond in size and position, relative to the cutting die 75, with a seam or other fixed portion of the upper 81."

Now, is there anything in that about stitch lines that you can find in that statement?

A. Well, the same as a stitch line.

XQ. 40. Yes. What does "or other fixed portion" mean?

A. Maybe other seam lines, stitch lines.

XQ. 41. I see. What we are discussing, however, as I gather from your testimony, is little stitches that surround the holes themselves? A. That is correct.

XQ. 42. You find nothing shown in the drawings, of that type, of the Freeman Patent, nor in the description of those drawings then, do you?

[fol. 632] A. I understand that this Freeman Patent has been judicially amended by the Circuit Court of Appeals of the First Circuit.

XQ. 43. Is it not your opinion, as a man skilled in this art, that the way the Freeman mask gauges is to line up with the outline of some bordering element in the shoe part, such as an overlay, a fancy line of stitching, or anything else which marks out more or less as a boundary the zone in which holes are going to be cut?

(The question was repeated by the reporter.)

A. In answer to that question, I would not care to dispute Mr. Freeman's testimony.

XQ. 44. All right. And what does he say?

A. Freeman testified that, with respect to gauging, there is a row of stitching around where the cut-outs are going to come, as one part of the thing that was marked on the upper. As I understand it, the Court of Appeals of the First Circuit selected that testimony of Freeman and restricted the Freeman invention to that character of gauging.

XQ. 45. What he says is:

"In this instance it is mostly along these lines (indicating)".

We don't know what he was indicating—yes—he was indicating on an upper, Plaintiffs' Exhibit No. 39, and he says:

"and there is a row of stitching around where the cut-outs are going to come and along the goring in the center there is a line of stitching, and the top edge of the quarter."

Now, he has named three things, hasn't he, in the passage I have read?

A. In the passage you have read, but I think you should

include the other fourth one, or the fourth one. Pardon me. I think you should include the fourth one, to make it complete.

XQ. 46. What fourth one? A. The marks.

XQ. 47. Well, he says:

"Those are all followed out in the edges of the opening in the mask and all those marks are within the outside edges of the upper."

Did he not say that?

A. He said that, yes, but—

XQ. 48. Now—

A. Just a minute. I want to explain that answer. But—

XQ. 49. (interrupting) Explain, just give your opinion, if you will, not deriving it from somebody else's statement, [fol. 634] but your own opinion as an expert, in answer to my question which I gave you.

A. I cannot, as an expert witness, give my opinion without stating the fact upon which I base that opinion.

XQ. 50. I wish you would base your opinion, Mr. McDermott, not on what anybody else said, see, but on what you know from a fact as an expert in this art.

A. If I should—

XQ. 51 (Interrupting) And I don't care for you to try to introduce some statements whereby you say that plaintiff in this case is estopped to make a contention; you are an expert here, and I want [—] to give your honest opinion. Now, I would like my question read to you, and ask you to please give me your honest opinion.

A. I know the question.

XQ. 52. All right.

A. In his testimony, Mr. Freeman—just a minute.

Mr. Allen: I ask that that be stricken out. I want this witness' opinion, if the Court please, and I think I have a right to it.

A. I cannot give my opinion unless it is clear.

The Court: Overrule the motion.

The Witness: It is clear as to what I am stating. Pardon me, Your Honor.

[fol. 635] The Court: Go ahead.

The Witness: There were four things that Mr. Freeman

said the upper must contain to use as a gauge, namely, the marks on the upper, the row of stitches around where the cut-outs are going to come and along the goring in the center there is a line of stitching, and the top edge of the quarter; those are all followed out in the edge of the opening of the mask, but all those marks are within the outside edge of the upper.

Now, from my personal observation of the operation of this type of mask, I know that all those four things were not used as a gauge at the same time. It would be impossible to use marks on the upper, stitching around where the cut-outs are going to come.

"along the goring in the center there is a line of stitching, and the top edge of the quarter."

"Those are all followed out in the edges of the opening in the mask and all those marks are within the outside edges of the upper."

From my practical observation, I know that Mr. Freeman did not mean that all those four [kind] of things on the upper were used at the same time. You might use one [fol. 636] of those four different things, but my testimony is based upon the Circuit Court of Appeals' decision, that they selected one of those four and restricted Mr. Freeman's operation to that one, namely, a row of stitching around where the cut-outs are going to come. That is my opinion, based upon the facts that I have before me upon which to base my opinion.

XQ. 53. Have you seen, Mr. McDermott, a number of these dies with masks in your experience? A. In operation?

XQ. 54. Yes.

A. Well, I have seen the operation many times.

XQ. 55. Well, you are in a position, perhaps, to answer the question that I originally asked you. Of course you can refuse to answer it if you wish. I cannot make you. The Court might tell you that you should, but you can answer from your own experience and knowledge, and I would like the question answered.

Mr. Kingsland: If the Court please, I do not believe that this type of cross examination is proper. He can ask this witness facts.

The Court: All right. Sustain the objection. Put your question.

Mr. Allen: Will you put the question?

[fol. 637] The Court: I don't know whether we have a question. You delivered a little lecture. I remember your lecture, but I have just forgotten the question.

Mr. Allen: All right. Let's read the question back. Maybe the reporter can find it.

(Thereupon the question was repeated by the reporter as follows:

"Is it not your opinion, as a man skilled in this art, that the way the Freeman mask gauges is to line up with the outline of some bordering element in the shoe part, such as an overlay, a fancy line of stitching, or anything else which marks out more or less as a boundary the zone in which holes are going to be cut?")

XQ. 56. Will you answer that question?

A. I think that I have seen the Freeman mask gauged more often against marks placed against the upper than I have seen it gauged any other way. I do, however, think, as an expert witness asked to go to the prior art and to the decisions that impressed a certain construction and an interpretation of the Freeman Patent, that I should hesitate further to give any personal opinion that I might have as contrary to that structure and mode of operation that [fol. 638] is impressed upon the Freeman invention by a court of last resort. In my opinion, that fixes the construction and mode of operation in such a fixed manner that that is the only basis that I can form any opinion on independently of any practical experience that I may have.

XQ. 57. You are unwilling to then make a statement from your practical experience?

A. I don't see how I can, Mr. Allen, in view of the interpretation impressed upon the Freeman invention by the Circuit Court of Appeals of the Circuit in which I happen to live.

XQ. 58. Do you agree, Mr. McDermott, that for a Court of Appeals, as you have said they have done, to construe

into a patent something that is not, according to your statement, shown in the patent, is inconsistent?

A. Not inconsistent with the way that the Freeman Patent was prosecuted, because in the Freeman Patent are many claims that have no basis in disclosure.

XQ. 59. I am simply asking you about, if you find in an opinion of a Court of Appeals a statement with regard to—put it concretely—you find a statement, as I gather, in a Court of Appeals' decision with regard to the kind of work, as you say, the kind of markings on the work that the Freeman mask must be used with, to be one which is not shown in the drawings or described in the specification, correct?

[fol. 639] A. What is your question? The question was whether it was consistent. My answer, yes, it was consistent with the way that the Freeman Patent has been prosecuted.

XQ. 60. Prosecuted, how do you mean, in the Patent Office?

A. Certainly. The Freeman Patent now contains or did contain long before it went to the Circuit Court of Appeals of the First Circuit many claims that had no basis or disclosures in the Freeman Patent.

XQ. 61. Well, do you think it was to be recommended for Courts of Appeals to find a construction of a patent which is not in accordance with the document?

A. I am in no position to instruct the Court of Appeals of the First Circuit.

XQ. 62. Now, Mr. McDermott, you have put yourself here as an expert in interpreting a decision of a court. Do you agree with me that this is a cardinal tenet of interpretation of judicial decisions: that where there is one interpretation which accords with reason and the facts and one interpretation which does not accord with the reason and the facts, that you must adopt the first one?

A. Well—

XQ. 63. Just answer the question.

A. I think that is the cardinal principle.

XQ. 64. That is all on that point then.

[fol. 640] A. Pardon me. The point that I wish to explain my answer.

The Court: Yes, you may explain.

Mr. Allen: Go ahead.

A. But it seems to me that you overlook the fact that Freeman has adopted the interpretation placed upon it by the Circuit Court of Appeals of the First Circuit, and I am only following that as to fact testimony.

The Court: Why do you say that—because he filed disclaimer and because he took—

A. (Interrupting) No, Your Honor, if a Circuit Court of Appeals makes an erroneous finding of fact in its decision, the proper procedure is for application, petition for a rehearing, which was never filed in this case.

Mr. Allen: That is wrong. We did file one. Go ahead.

The Witness: It was not carried through to a decision.

Mr. Allen: Well, they overruled it, but go ahead.

The Witness: I meant that the Court of Appeals has never corrected any possible errors of finding of fact in its decision. It stands now, as I view it, as part and parcel of the prior art with respect to the Freeman Patent.

Mr. Rogers: Mr. Allen made the remark in contention to the witness and, therefore, I think the petition perhaps [fol. 641] should be put in.

XQ. 65. In connection with the Freeman mask, is it your opinion that it is a necessity for proper functioning that the mask in every portion should correspond to some underlying stitching on the upper, or maybe just correspond in part and not in part and still function?

A. As I understand it, Mr. Allen, every—the complete edge of the window may act as a gauge, a portion of it which partially surrounds the stitched pattern may act as a gauge, and still another portion which extends along the stitched patterns of ornamentations, but does not surround any part of it, all of those come within the purview of the Freeman invention, so far as the mask is concerned.

XQ. 66. You draw no distinction, do you, or do you draw a distinction in the construction of patents, and I am not talking about what any court said, between the word “surround” and the words “partially surround”?

A. Yes.

XQ. 67. You do. Well, that is all.

Mr. Kingsland: Mr. Allen, you made a remark about

some petition for rehearing. Will you let me have that, please, the one you questioned the witness about?

Mr. Allen: Just a minute, until I look at it myself. [fol. 642] I don't remember about it. I filed one, I know that. Do you want this introduced in evidence?

Mr. Kingsland: I don't know. You have made a remark about it.

Mr. Allen: I will show it to you. Here is the petition for rehearing (handing a document to Mr. Kingsland).

Mr. Kingsland: Do you want to put it in?

Mr. Allen: No, I don't think it makes any difference, except this witness said there was no petition for rehearing.

Mr. Kingsland: Well, I do not want to delay the procedure here at the present time.

Mr. Allen: It is my copy of the decision. All right. Go ahead, if you want to read it.

Mr. Kingsland: You will get it back. That is all, Mr. McDermott.

Mr. Kingsland: Now, if Your Honor please, that is the defense to the complaint, except Mr. Allen was to furnish us the machine licenses, and I understand that he has agreed to do that, and that we may formally introduce them in the record, even after the close of the case, if that is agreeable to the Court.

The Court: Yes.

[fol. 643] Mr. Kingsland: There will be just one copy, which I understand Mr. Allen will agree will be typical of the machine licenses outstanding. That relates to the defense of unclean hands.

The Court: Very well.

Mr. Kingsland: The defendant rests in answer to the complaint.

The Court: Do you wish a breathing spell?

Mr. Allen: A brief recess would do.

(Recess, ten minutes)

Mr. Rogers: If the Court please, with reference to this paper, which apparently is a petition for rehearing of some kind in the Premier case, which petition was seemingly urged before the Court of Appeals there, following their opinion, to which considerable reference has been made—

Mr. Allen: (Interrupting) What?

Mr. Rogers: Isn't this a petition for rehearing before the First Circuit Court of Appeals?

Mr. Allen: The thing you just opened there is the decision.

Mr. Rogers: I am referring to the whole book here.

Mr. Allen: The whole book is the record in the [fol. 644] Supreme Court.

Mr. Rogers: In any event, I have before me a paper that purports to be what I have just identified. I think this whole book, whole petition should go in, because of the fact that it bears out our position that no petition for rehearing was made, to correct what is now claimed to be a mistake of fact on behalf of the First Circuit Court of Appeals.

Mr. Allen: Yes. Well, now, I am willing to concede. I think we are encumbering this record tremendously. I do not say that the Court of Appeals made a mistake. What I was explaining, Mr. McDermott's explanation of what the Court of Appeals' decision did makes it ridiculous. I did not make any such objection. My petition for rehearing was based on other things.

Mr. Rogers: Your implication, Mr. Allen, was such that I feel compelled to ask that this petition be put in.

The Court: All right.

Mr. Rogers: However, I should like to call to the Court's attention one or two statements herein. On page 8 of this petition, and I may say apparently page 26 of the Supreme Court record, I find the following:

"While we believe that we have a right to go to the [fol. 645] Supreme Court in this matter, because we feel that the decision in the Freeman v. Western Supplies

case is a direct ruling⁶ that the Freeman claims broader than claim 6 are sustainable as covering a widely different mechanism, still we feel that this Court will wish to express its views of the force and effect of the decisions, and more fully state the facts involved, than it has done."

Mr. Allen: I wonder, is that put in as an admission against interest of some kind—my petition for rehearing in another case?

Mr. Rogers: That is right.

Mr. Allen: Well, if the Court please, I think that is going pretty far. Mr. Sutherland collected the authorities the other day on that matter of putting in arguments, and so forth, of counsel as some kind of admissions of fact against a party. I do not understand what counsel just read, but I hate to be subjected to a situation of having every word I said in briefs and petitions in other litigations brought forward as an admission of fact on the part of my client. I can show you two decisions in this Circuit.

Mr. Rogers: Is it your position you do not understand [fol. 646] what was just read?

Mr. Allen: I do not understand what you are trying to get at.

Mr. Rogers: Your statement was you did not understand what I just read, and it was my understanding you wrote it; however, I guess I must have misunderstood you.

Mr. Allen: I refer, Your Honor, to—

(Cites cases.)

The Court: Overruled.

Mr. Allen: There is sworn statement of parties. That is an argument of counsel.

The Court: Overrule the objection. It is apparent, however, that that should not have any particular weight in this case.

Mr. Rogers: Well, now, I should like to enter in the record also the statements of this appellant, or, rather, of this plaintiff in its petition for certiorari from the Free-

man [versum] Premier decision. I should first like to ask whether there were any additional proceedings in that case beyond this petition for rehearing and beyond the petition for certiorari, Mr. Allen? Because I should think they should be produced.

Mr. Allen: Yes. A decree was entered on the mandate which held the patent No. 20,202 valid and infringed by [fol. 647] the defendant, the Premier Company.

Mr. Rogers: That was in the contempt proceeding?

Mr. Allen: No. That was the decree in the main case. Then we filed a contempt proceeding and they were found to be in contempt.

Mr. Rogers: And that is all. Final decree has been entered.

Mr. Allen: Final decree has been entered and those people are now licensed.

Mr. Rogers: All right. Now, in this paper entitled "Brief in support of petition for writ of certiorari", the following was stated:

"The anvil is provided with (a), a flat top, this top proportioned to that area of that portion of the prefinished shoe upper to be decorated; (b) a recessed elevated support on which the flat top is mounted; (c) a cutting plate element mounted on the support with its cutting edges working upwardly through the holes in the flat top."

"A piece of work is assembled on the anvil that is built to receive it, stretched smooth and properly located with reference to the cutting edges, and then the assembly (readily held without danger) is struck [fol. 648] a blow with a press head, forcing the work down over the die and cutting out the holes."

In addition to that, they carefully contrasted the First and Eighth Circuit decisions in the following language:

"The Eighth Circuit decision and the decision in the case at bar essentially conflict with each other."

"Because in the Eighth Circuit, which involved the question of whether Altvater, as a licensee of Free-

man, was entitled to put out a certain machine and dies for use therewith, free of his license contract. Among the claims set up as infringed by the Altvater machine and cited by the Court of Appeals for the Eighth Circuit in its opinion, 66 Fed. (2) 506, is the following:

'87. In a die press, the combination with a bed, a pressing member and a cutting-out tool supported other than by the pressing member, of a work supporting member, on said bed, adapted to fit inside of a made shoe upper, provided with a work supporting surface, elevated above the bed, upon which the portion of the made upper to be operated upon is positioned flatwise'—"

Mr. Allen: If the Court please—I wonder if you (ad- [fol. 649] dressing Mr. Rogers) have to continue reading. I will give you permission to have anything you want written into the record. I would like to get ahead with this case.

Mr. Rogers: I would like to put my evidence on, if you don't mind, I would like to.

Mr. Allen: You are reading claim 87 of the patent. You can say what it is.

The Court: Go ahead.

Mr. Rogers: If the reporter will simply follow 87, I will get it out as rapidly as possible.

(The concluding portion of Claim 87 is as follows:)

"and provided with a depression below the elevated surface in which another portion of the upper may be positioned by at least one hand holding the work on the work support."

(And here Mr. Rogers continued to read as follows:)

"The decision of the Court of Appeals for the First Circuit in the case at bar, in the respects in which the errors complained of were [committed], involved as a key claim the following, which was quoted in the decision:"

And we find claim 6 quoted.

(The said quotation is as follows:)

[fol. 650] "Figure 6. For use in a machine for cutting designs in shoe uppers, the combination including work supporting means, a work cutting unit with up-standing cutting edges mounted thereon, said work supporting means and work cutting unit constructed with a top portion to support in a substantially flat manner a portion of the shoe upper in which a design is to be cut and with lateral sides so shaped that the upper may be draped thereabouts, without buckling the shoe upper while the design is cut therein."

Then the following:

"A reading of these two claims shows that claim 87 includes the press, claim 6 calls for a die device for use in a press. Both involve the concept of providing means for laying a part of a curved piece of work flat, in a pre-arranged relation to a cutting element, with the parts distorted by this flattening operation and the other curved portions of the work draped out of the way, and held there. Under such circumstances the stamp or press head operation is subsequent to the positioning of the work, and cannot disturb its relation to the die. No such association of the [fol. 651] work with the die would be possible if the cutting edges were on the movable press head."

And, if the Court please, that was a comparison of claim 6, which was disclaimed, and claim 87, which was not; and claim 87, of course, was adjudicated by the Eighth Circuit and appears in one of the reissues. Continuing the quote:

"The machine involved in the Altvater case was a press having an anvil with a flat top, as in Freeman's patent, but the cutting edges of the die were not on this anvil. Instead they were on a sort of mechanical hand, which could be brought down independently over the work after the area to be cut was laid flatwise on the flat top of the anvil. In the Altvater machine the operator first assembled his work in position, then brought the die down and shifted the work to bring it in proper relation with his die. Then the operator could trip the head of the press and bring it down to strike the die and force it through the work."

"The differences over the Freeman device were that the die cut down instead of up, the die was placed on [fol. 652] the work from above, and the die was struck instead of the work being struck and forced down over the die."

"The question before the Court in the Altvater suit was whether claim 87 of Freeman could be construed to cover this Altvater machine and die. If the Freeman patent had been considered by the Court as nothing but a minor improvement, it would have been bound to hold the licensee's machine to be free of the patent."

An additional paragraph was this:

"It is maintained that claim 87 of the Freeman patent was in fact considered valid in the Eighth Circuit, and accordingly that there is a direct conflict of decision, if claim 6 of the patent be held invalid in the First Circuit, as would result from the case at bar as it now stands."

Further:

"It was necessary for the Court of Appeals of the Eighth Circuit to find the Freeman patent valid in order to find that it was infringed by the very different structure of the defendant there. Had the mechanism of the defendant in the cause in the Eighth [fol. 653] Circuit been a copy of that of the Freeman Patent, as was the structure of the respondent in the instant cause, then the finding of validity of the Freeman patent would have been much less necessary to the decision."

That is the end of those. I may say certiorari was denied.

Mr. Allen: Certiorari was denied, in other words, the Supreme Court did not agree that the two circuits were in conflict with each other, in spite of your argument, which I think is an authority in my favor. May I go ahead?

Mr. Rogers: Go right ahead, yes, sir.

Mr. Allen: Are you through with your case, sir? I thought your case was closed, and by moving around and

reading those documents, Your Honor, that gets to a position, when I get through with my witness and they are not ready to cross examine.

The Court: Oh, well, go ahead, Mr. Allen.

(A document consisting of proceedings in the Circuit Court of Appeals for the First Circuit was marked by the reporter as Defendants' Exhibit L.)

(Defendants' Exhibit L omitted from the printed record at this place pursuant to an Order of the United States Circuit Court of Appeals of March 10, 1942.)

[fol. 654]

C. RUSSELL RIORDON,

a witness of lawful age, being duly produced, sworn and [examined], testified on behalf of the plaintiffs, in rebuttal, as follows:

Direct Examination.

By Mr. Allen:

Q. 1. State your full name, residence, and occupation.

A. C. Russell Riordon, Washington, D. C. I am engaged in the practice of patent law before the Patent Office and the courts, testifying as expert in patent causes, soliciting applications for patents, and the general run of patent business.

Q. 2. What has been your experience, Mr. Riordon, in connection with shoes and shoe machinery, and in particular with dies of various types for use in shoe machinery?

A. For the past twelve years I have specialized in shoe machinery, and particularly in ornamenting machinery, perforating machines, and machines of that general nature, and dies and machines of the type involved in this case.

Q. 3. And have you experted in connection with the accounting proceedings in this case?

A. I have experted in connection with the accounting proceedings in this case, testifying several times at different hearings.

Q. 4. Now, did you testify as an expert in the case [fol. 655] Freeman against Premier?

A. Yes, sir. Several times.

Q. 5. Did you testify in connection with the contempt proceeding? A. I did.

Q. 6. In Freeman against Premier? A. I did.

Q. 7. Can you produce here the contempt die, that is, the die that was held to be in contempt by Judge Brewster in the contempt proceeding of Freeman against Premier?

A. I can.

Q. 8. Will you please do so?

Mr. Kingsland: If the Court please, "held to be an infringement by Judge Brewster", is not accurate, for this reason: that the pleadings in that case will show that it was practically a consent decree that resulted in holding this construction within the patent. The defendant in that case submitted an answer which practically consented to this being included, if the others were let out.

Mr. Allen: The decision of Judge Brewster refers to this die and states his reasons with regard to it, and I think that—

The Court: (Interrupting) Overrule the objection.

Q. 9. Now, have you also got the piece of upper material which was in evidence on the contempt proceeding?

[fol. 656] A. Yes, sir; I have the upper, which bears the tag "Defendants' Exhibit No. 3 in Freeman versus Premier, Equity No. 3909", and a similar tag is on the die which I have just produced, and [identifies] it as Defendants' Exhibit No. 1 in Freeman versus Premier, Equity No. 3909.

Q. 10. Now, will you please put the piece of work that you have just referred to on the die and illustrate to the Court how it was masked?

(The witness demonstrates.)

A. This upper which I have now placed in the machine beneath the mask has a fore part of red seamed down the center, and having a configuration which is curved from the tip end of that center seam, and incidentally pinked along the curvature running toward the upper part of the shoe and terminating in a strap, which strap is continued around to form the balance of that upper portion. The mask of the die has portions which are curved to at least partially surround that red section of the shoe, the curved part as I have just described it, and another portion which conforms to the part of the seam

line. The gauging is effected by relating edge portions of that mask to the parts of the shoe upper which I have just described.

[fol. 657] Q. 11. I will hand you an ink drawing of the mask that you have just been referring to, and ask you to note by a suitable marking on it the gauging portions of the mask, that is, those portions which match up with parts of the upper. You may modify that sketch a little bit, if necessary.

A. On the actual mask, in addition to the two lines which I have inked as gauging portions of the mask, which coincide with curvature on the work, and on the center seam, there is also a little notch at the opposite end of the mask which I am indicating now in ink. This notch also functions as a gauging portion of the mask, in addition—

Q. 12. (Interrupting) Are you sure you have got that put in the right place—no—I mean on your sketch.

Mr. Allen: Now, the die to which the witness has just been referring, Exhibit 1 in the contempt proceeding, I ask to have marked as Plaintiffs' Exhibit No. 47.

(The said die was marked by the reporter as Plaintiffs' Exhibit No. 47.)

[fol. 658] Mr. Kingsland: Your Honor, we are compelled to object to that, if the pleadings in the case show that there was a consent decree made, also entered.

The Court: Well, overrule the objection.

Mr. Allen: Yes, because the decision shows what, [fol. 659] entirely, Your Honor.

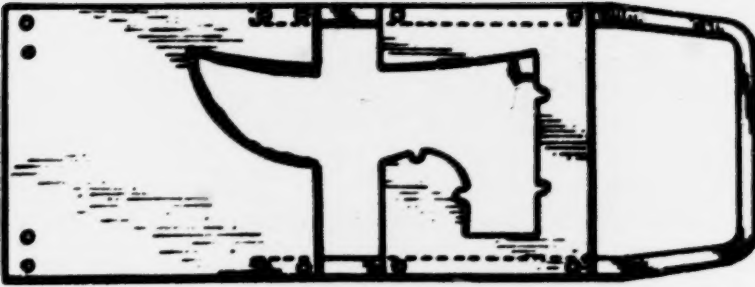
Mr. Kingsland: Well, do you have a copy of the final answer in the case?

The Court: It is a District Judge's opinion.

Mr. Allen: That is right. Simply of interest as it construes the opinion of the Court of Appeals of the First Circuit, which he considered binding upon him as to a certain die. I will offer the upper as 48 and the witness' ink sketch as No. 49.

(The said upper and ink sketch were marked by the reporter as Plaintiffs' Exhibits Nos. 48 and 49, respectively.)

Plaintiffs' Exhibits Nos. 48 (Physical Ex.) and 49 Offered in Evidence.



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Fors

[fol. 661] Q. 13. Does the opening in the mask in this exhibit No. 47 conform in shape to the configuration of the series of holes that are to be punched in the work? A. Yes.

Q. 14. In what respect does it and what respects not? Did you understand the question? Will you (addressing the reporter) read the question to the witness?

(The question was repeated by the reporter as follows: "Does the opening in the mask in this exhibit No. 47 conform in shape to the configuration of the series of holes that are to be punched in the work?")

Mr. Allen: I mean throughout.

[fol. 662] A. Not throughout.

Q. 15. That is what I meant.

A. The pattern of tubes which will produce the openings, or perforations, or cut-outs in the work, is arranged in a group terminating in a curved point at one end and in a thickened base end, if I may so describe it, at the other. That base end is adjacent a straight row of similar tubes and adjacent the punched holes in the buckle strap in this particular work. The gauge mask at one end of the die assembly is provided with an opening extending from an edge of the plate and curved to conform to the curvature of the pattern of tubes, and extending back on the other side of that cut-out portion in a line conforming to the opposite part of the pattern of tubes. Then there is a space beyond that in which there is no part of the gauge mask which conforms to anything on the work.

Q. 16. Mr. Riordon, you have seen the dies, Exhibits F, G, and H, introduced by the defendant in this case, the last few days, have you? A. I have.

Q. 17. Was there such a die before the court—District Court and Court of Appeals, in the Premier case?

A. There was, known as Exhibit B.

[fol. 663] Q. 18. Can you produce Exhibit B?

A. I have that die and hereby produce it.

Mr. Allen: There is a picture of that die in the record in the Premier case as Exhibit D. I thought the original die would be better. I would like to have the die marked in this case as Plaintiffs' Exhibit No. 50.

(The said die was marked by the reporter as Plaintiffs' Exhibit No. 50.) (Physical Ex.)

Q. 19. Will you take the dies, Exhibits F, G, and H, and compare the structure and mode of operation of the overlying plates of the dies F, G, and H, with the overlying plates of the dies, Exhibits 1 and 2?

A. The dies, Plaintiffs' Exhibits Nos. 1 and 2, are each provided with a top plate having portions shaped to at least partially surround a part of the ornamental pattern of tubes which will produce the ornamental openings in the work, and those portions extend quite obviously over the zone of cutting action. There is, of course, nothing of that sort in the three dies, Defendants' Exhibits F, G, and H. And I notice also that the gauging plate mask in Exhibits 1 and 2 of the plaintiff extend from the forward or leading edge of the die in each instance down into and [fol. 664] over the zone of operation, whereas in the Defendants' Exhibits F, G, and H, the plate which will overlie the work extends from the rear or operator's side of the die, and in no instance extends into or over the zone of cutting operation. In fact, as I just stated, there is no provision for any portion to partially surround the tubes in that zone of action.

Q. 20. What is the importance, would you say, in that aspect of the thing, particularly considering that there are portions of the plates in Exhibits 1 and 2 which surround some of the dies, in the fact that the plates in F, G, and H are, as you say, entirely behind the zone of cutting action?

A. There are at least three very important points or distinctions in those structural differences. When the work is placed in the dies, defendants' Exhibits F, G, and H, it will be placed underneath the clamping plate. This piece of work which I have here happens to be one of the exhibits picked up at random, and I am using it solely for purposes of demonstration. When the work is placed beneath the overlying plate, clamp plate, of Exhibit F, as I have it here, it will be positioned under that plate at the rear or operator's side of the die, and then pushed forwardly until [fol. 665] stops are engaged by that sliding top plate and the forward portion of the work which is to be ornamented is projecting the whole time, the work being clamped at the rear and held in its position under the clamp. When the plate is moved forward, that places the work medallion over the row of tubes which will ornament the tip sweep,

or place an imitation tip line, and if there should be any obstruction, or for any reason friction between the work and the die, too, there is a chance of that work being curled up. For example, in the tip press using backing paper, it is not infrequent that a folder or loop of that paper will be hanging down, could very readily brush the work back, and as a result spoil whatever good result, or at least delay the work of the operator, who is working piecework, and speed counts. The same is true with Defendants' Exhibit G, in which the work is placed forwardly to its proper position, clamped in position, and then shoved forwardly into position over the medallion or over the line of tubes, which seem to be missing from this particular exhibit for the tip sweep. In Defendants' Exhibit H, the top plate does not slide, it is fixed against movement longitudinally of the die, but the work still has to be placed there beneath and pushed forward with a free [fol. 666] end. In Exhibits 1 and 2 of the plaintiff, the die—Your Honor will understand that in all of these dies, the die is pulled forwardly from beneath the plunger when the work is placed on, then the whole die has the assembly shoved in, so that even in a fixed plate such as Defendants' Exhibit H, where you have placed the work, there is still that chance when you shove that die under the machine of it being curled up or brushed aside. Frequently, too, these uppers or blanks that are going into the makeup of an upper are rolled up when they come to the operator, a great big bundle of them, and there is no assurance that they are going to lie exactly flat. Now, nothing of that sort happens in connection with the dies of Plaintiffs' Exhibits 1 and 2, because your plate is at the other end of the die, and when the work is placed there under and shoved forward, it is held down, there is nothing to obstruct it, the die moving inwardly with the work being held at its leading edge. That is one advantage.

Another advantage in the idea of extending this plate of Exhibits 1 and 2 rearwardly, or, for that matter, forwardly, over the zone of the cutting action, and having portions which partially surround that part of the work which is [fol. 667] to be cut, the work is held adjacent the cutting and it is held in its flatwise condition without being distorted in any manner or stretched, or slipping or pulling. That cannot be true in the case of the Defendants' Exhibits

F, G, and H, because they have nothing partially surrounding the work, and certainly nothing extending over the zone of cutting action.

There is still a third advantage. These dies are placed under the plunger, which comes down with terrific pressure, and while possibly somewhat remote, there is at least a tendency or a chance of cracking or injuring the work. The mask, Exhibits 1 and 2, by truly masking and covering the work in the zone of operations protects the adjacent surfaces of the work, that is, adjacent to the portions which are to be cut, against injury.

Q. 21. Referring back to the Freeman Patent again, Mr. Riordon, will you explain to us and point out where it is described in the patent the structure whereby the clamping member, that is, the mask, is constructed and arranged to provide an overlying yielding engagement permitting adjustment of the material and subsequently a firm holding engagement with the work?

A. In Reissue Patent 20,202, page 2, column 2, beginning line 69, there is a description of the structure shown [fol. 668] in Figure 4 of the patent.

Q. 22. Yes. What does it state there, will you describe it? A. It reads:

"The mask 79 is of the shape, in longitudinal section, as shown in Fig. 4; that is, the left hand portion adjacent the hinge member 78 is engaged by the portions 82 and 83 of the mask. Such portions will hold one end of the upper 81 in approximate position and the complete position of the upper will then take place, after which the operator will pull down the mask 79 into the position in Fig. 4 where it will be observed that the front portion of the upper is engaged by the portions 84 and 85."

Q. 23. Now, that feature of construction that you have just described, is it or is it not disclosed in this model that we use, Exhibit No. 13?

A. It is not disclosed in Exhibit No. 13.

Q. 24. In Exhibit No. 13, the mask is a perfectly flat plate, is that correct? A. Yes, sir.

Q. 25. Is there any construction there providing for two kinds of engagements of the plate with the work? [fol. 669] A. No, sir.

Mr. Allen: If the Court please, I don't plan to ask this witness any questions about construction of legal decisions and so on. That closes my direct examination of the witness.

Cross Examination.

By Mr. Kingsland:

XQ. 1. Now, Mr. Riordon, have you examined all of the examples of infringement adduced here by the plaintiff, that is, Exhibits 1 and 2, which are physical exhibits, 3-A, which is a blueprint or a photostat, 4 and 5?

A. May I ask, if I understand your question, have I seen sketches or photostats and these—

XQ. 2. (Interrupting) Yes, have you examined them?

A. That is correct, I have.

XQ. 3. Have you compared them with the invention of the Freeman Reissue Patent 20,202? A. I have.

XQ. 4. Do you consider that all of the structures exemplified by these exhibits 1 to 5, inclusive, are within the invention of that reissue patent?

Mr. Allen: Now, if the Court please, I think that goes entirely beyond the direct examination of this witness. I [fol. 670] asked him no opinions whatever about infringement of patents or anything else. I merely asked him to compare structures and identify two certain—two or three certain exhibits, and I think I see no reason why counsel should have a right to examine this witness with regard to what his opinion is about inventions and so on.

Mr. Kingsland: Well, he is not submitted then for any opinion on the reissue patent?

Mr. Allen: No, he is not submitted for any legal opinions as to—

Mr. Kingsland: (Interrupting) I don't mean legal opinions.

Mr. Allen: He is submitted for exactly what his testimony was, and no more.

Mr. Kingsland: I think that the question, Your Honor, is proper.

The Court: We will overrule the objection.

The Witness: Will you read the question?

Mr. Allen: I tried to limit my examination very closely so we would not get in a fog in cross examination about matters which were not brought up. Perhaps this is remotely germane, but I do not want to bring the matter up again, Your Honor. It goes further.

Mr. Kingsland: Will you (addressing the reporter) read [fol. 671] the question please?

(The last question was repeated by the reporter.)

A. Yes, sir.

XQ. 5. Well now, Mr. Riordon, what structural combinations do we have to find, in order to be within the disclosure of the inventive part of patent No. Reissue 20,202?

A. If I understand your question, there must be found in this exhibit the structure as recited and defined in the claims of that patent.

XQ. 6. Well, let's take claim 6, for example. That calls for a combination of a cutting die having cutting edges for cutting designs in shoe upper material; a support for the die and a mask cooperating therewith, said mask being provided with one or more edge portions partially surrounding the cutting edges of the die, said edge or edge portions shaped to act as a gauge for positioning the material beneath the mask. Now, let me ask you what your conception of the mask as defined in that claim is.

A. With reference to any particular exhibit?

XQ. 7. No. I want to first get your conception of it, as defined in the combination that I have just read you.

A. My conception of the mask, in accordance with the claim 6 which you just read me, would be a plate which is provided with at least one edge portion which partially [fol. 672] surrounds cutting edges in the die, and which edge is also shaped to function as a gauge for the positioning of the material beneath the mask.

XQ. 8. Do you consider that it is necessary in a structure, in order to respond to the invention of the reissue patent that we are considering, that the plate or mask shall act as a clamp?

A. Claim 6, as you just read it, makes no reference to a clamp.

XQ. 9. So it is your view that, regardless of whether the plate functions as a clamp, it responds to the combination structure of claim 6?

A. My view, is just as I said it, in the terms that I took from claim 6.

XQ. 10. Well, now are you expressing those views entirely independent of any interpretation that may be put on them as the result of what the Court of Appeals for the First Circuit definitely said with respect to the structure?

Mr. Allen: If the Court please, I see no reason why the witness might not be asked the meaning of terms, but now we are getting into this witness' construction of the First Court of Appeals' decision, which is clear outside of the scope of the direct examination, and I do not think that we should go into that.

The Court: Sustain the objection, but that is not the [fol. 673] question. He merely asked if he construed this claim independently of the decision of the First Circuit.

Mr. Kingsland: That was my question, Your Honor.

The Court: Yes.

Mr. Kingsland: May the witness answer?

The Court: Yes, he may answer that question.

A. Naturally, I have taken into consideration the decision, the opinion of the Court of Appeals of the First Circuit, but I have formed my opinion from my understanding of the invention and from my understanding of what the Court of Appeals might mean by its opinion, and not by other views of counsel or others as to their understanding of what that opinion might mean.

XQ. 11. But you have, in expressing this opinion, had that opinion of that structure, that is, that all of the claims of the reissue patent are responded to by the plaintiffs' examples of so-called "infringement" here?

Mr. Allen: No. The claims that we have relied on are 1 to 6 in our bill of particulars. Six only stressed in this case, that was our position. 7 and 8 are all about a hole in the mask.

Mr. Kingsland: Well, I asked counsel at the beginning of the case whether we were limiting this to any specified claims in this reissue or whether they were all included. [fol. 674] Otherwise, we could have saved considerable examination of Mister—

Mr. Sutherland: (Interrupting) No, Colonel, I do not think you did. You just asked whether we were limiting it to claim 6, and if you will look back in your pleadings, you will find it was virtually limited to claim 27.

Mr. Allen: We will leave out 7, 8 and 9, I think, 7, 8 and 9, leave those out.

Mr. Kingsland: It is considered definite then you will withdraw—

Mr. Allen: Don't need to consider 7, 8 and 9.

Mr. Kingsland: That you are withdrawing from this suit claims 7, 8 and 9?

Mr. Allen: Yes.

Mr. Kingsland: And leaving in claims 1 to 6, inclusive?

Mr. Allen: I think that will be understood.

Mr. Sutherland: I don't think it should be understood at this time. I don't think they have ever been in the case.

Mr. Allen: Anyhow, you may proceed on that basis, though. Not estopping us, though.

XQ. 12. Then in order to get it clear, when you answered my early question about the question of response of structures to the claims, you answered it on the basis that you were limiting it to claims 1 to 6, inclusive?

A. I answered on the basis that I did not hear you use the word "claims". I thought you said the invention of the Freeman patent.

Mr. Kingsland: All right.

Mr. Allen: That is what he did say.

XQ. 13. Well, we probably were talking about the same thing and using different language.

A. I listened to see if you were using the term "claims".

XQ. 14. Well, let's get it down to this situation: So far as Plaintiffs' Exhibit No. 1 is concerned, what claims of the reissue that we are considering, in your opinion, describe the structure that is included in that exhibit?

Mr. Allen: Now, if the Court please, it seems to me that that is something which is purely for the Court to do. I did not ask the witness to make any such statement or

go into any such thing; therefore, it is not, in my view, proper cross examination, nor would it have been proper direct, had I put it to the witness in that language.

The Court: Overrule the objection.

XQ. 15. Have you a copy of the patent there, Mr. Riordon? A. Yes, sir.

Mr. Allen: I believe that it is proper to go ahead [fol. 676] in this case, as we have done, on the basis of claim 6, to shorten and simplify the thing. I simply don't want to withdraw allegations that I have made, but I think that at this trial we can confine ourselves to claim 6 and go ahead on that basis, to greatly shorten it, and I think the Court's efforts and everybody else's.

Mr. Rogers: Well, Mr. Allen, is it your position that if claim 6 were held not infringed, then there would be no question about any other claims not being?

Mr. Allen: The way I construe the claims, it seems to me that would be a fair statement.

Mr. Rogers: Well, may we rely on that?

Mr. Allen: I think so, yes.

Mr. Kingsland: I think I can shorten it up, if that is your position.

Mr. Allen: Yes, that is the position I will take.

XQ. 16. All right, let us then confine it to claim 6, and tell me whether you find the structure that is described in the language of claim 6 in plaintiffs' Exhibit No. 1.

A. Is the previous question closed? There was a question on the record, Mr. Kingsland.

Mr. Allen: That is true.

Mr. Kingsland: I withdraw that, in view of the statements of counsel.

[fol. 677] Mr. Allen: Correct.

Mr. Kingsland: The other one was rather broader.

The Witness: I just wanted the record straight.

Mr. Kingsland: Yes. And I will now ask the last question.

The Witness: If you will repeat that, please.

Mr. Allen: It was just to proceed with claim 6. And you asked if he found in Plaintiffs' Exhibit No. 1 the structure that is described in claim 6, is that right, Mr. Kingsland?

Mr. Kingsland: That is right.

Mr. Allen: You may proceed.

A. I do find a structure in Exhibit No. 1 which fits within claim 6, or as called for by that claim. Thus I find a cutting die having cutting edges. That seems to be obvious. They are arranged in a pattern, and, therefore, will cut designs in shoe upper material. I find a support for the die, being the base. I find a mask cooperating with the support and arranged to hold the work between it and the support. That mask is provided with one or more edge portions to partially surround the cutting edges of the die in these irregularly curved edges at each side of the die terminating in a fancy T-shape portion of the mask, and those edges are shaped to act as a gauge for the [fol. 678] positioning of material beneath the mask.

XQ. 17. Now, that claim I asked you about before, and you say that it is responded to, regardless of whether there is a clamping action of the plate?

A. I do not believe I said that.

XQ. 18. Well, let me put it to you then. In claim 6, is it necessary that a structure shall include a plate that acts as a clamp as well as a gauge, in order to come within the definition of structure in that claim?

A. That [claims] recites a mask cooperating therewith, said mask being provided with one or more edge portions, and so forth. Now, in this particular exhibit, it is quite obvious that there is a clamping action, whether the [claims] calls for it or not.

XQ. 19. Well, I was not implying it; I was referring to something there. I was asking you if, in your opinion, a structure in which the plate did not have a clamping action would be included within claim 6, assuming the other features to be present?

A. It is my personal opinion that it is not essential to the construction of that claim to read a clamp in there.

I believe the Court of Appeals for the First Circuit, however, would probably regard a clamp as in that claim.

XQ. 20. Well, in other words, the claim as it stands, [fol. 679] without interpretation, in your personal view, is broad enough so that it would be responded to by the structure as you have defined it, whether or not the plate had a clamping action?

A. In my personal opinion, I do not think a clamp would be essential to that claim. As I say, I have taken, however, into consideration the opinion of the Court of Appeals of the First Circuit, and it is not up to me to overrule that opinion.

XQ. 21. In other words, you agree that where a court has spoken that that is one source that we go to, to interpret a claim? A. Unquestionably.

XQ. 22. And the primary source? A. Yes, sir.

XQ. 23. Now then, with that opinion in view, as I now get your position, claim 6 requires, although it does not define, that the plate shall act as a clamp?

A. Well, I am not here to interpret the opinion of the Court of Appeals of the First Circuit.

XQ. 24. I understand that very well, but I think you can answer the question without doing that.

A. Well, I have answered that question as to my personal views, and whether in that present instance I happen to agree with the Court or not, I am still entitled to my personal view.

[foi. 680] Mr. Kingsland: Well, would you please repeat the question, Mr. Reporter?

(The question was repeated by the reporter as follows:

“Now then, with that opinion in view, as I now get your position, claim 6 requires, although it does not define, that the plate shall act as a clamp?”)

XQ. 25. Is that correct?

A. Read the last part of that, please?

(The question was again repeated by the reporter.)

A. Well, I cannot give you any different answer than I just gave you. I personally don't think that that claim requires a clamp. I think it is probably that interpretations of the opinion of the Court of Appeals for the First

Circuit can be made to show that that claim does include a clamp.

XQ. 26. Well, do you think that that claim, unless there is imported into it the feature that the plate acts as a clamp, that is, the mask acts as a clamp, that it is distinguished from the prior art as you know it?

A. I certainly think it should have been held to be distinguished from the prior art, as I know it, but I still think there is subject matter in that claim which can be read to mean a clamp, if that becomes necessary to sustain that claim.

[fol. 681] XQ. 27. Well, I think I get your position. Apparently, your individual view with respect to the interpretation of that claim does not conform to what you consider the view of the Court of Appeals of the First Circuit with respect to this feature.

A. I have not said what I considered the view of the Court of Appeals for the First Circuit to be. I said it could be interpreted and probably would be interpreted.

XQ. 28. Well, tell me now, then, what your view is (you say you have considered this opinion of the Court of Appeals) as to whether or not the clamping function shall be imported into claim 6 or not?

A. I think the Court of Appeals intended that the clamping function should be there.

XQ. 29. Yes. Now, that being so, you are in disagreement with the Court of Appeals as to the necessity of that clamping function being imported into claim 6, in order to give it a proper interpretation?

Mr. Sutherland: Are you referring to the Court of Appeals for the First Circuit?

Mr. Kingsland: That is right, Court of Appeals for the First Circuit.

A. I still maintain my individual opinion.

XQ. 30. Which is contrary to what you understand the [fol. 682] Court of Appeals of the First Circuit to have decided with respect to this very subject matter, is that right? A. On that point, yes, sir.

XQ. 31. All right. Now, is it your concept that Plaintiffs' Exhibit No. 1 has a window in the plate?

Mr. Allen: Now, I wonder what that has to do with the

direct examination of this witness? I cannot see that it has any. Of what importance is it?

The Court: Well, didn't he testify about that plate, Mr. Allen?

Mr. Allen: Yes, but I mean why—no, he did not testify to anything, except he compared these old devices with the devices of the defendant which we accuse here, and that is the very last thing he did.

The Court: He described the operation and he located the cutting edge and gauging edge.

Mr. Allen: That is right.

The Court: At different points.

Mr. Allen: That is right.

The Court: Overrule the objection.

The Witness: Repeat the question.

XQ. 32. I will ask you then, to repeat it, ask you whether Plaintiffs' Exhibit No. 1, in your opinion, is provided [fol. 683] with a window?

A. A window, given its normally understood meaning, as for example, in a building, is an opening through which something may be seen, or for ventilation, or for other purposes, nevertheless an opening. I do not know that a true definition of a window would say that it was something bounded on four sides. When you apply a term having a normally definite meaning to something in which we would never regard as having a window normally, then of course that word has to be given a meaning in conformance with the element or part designated, which will have a reasonable, sensible meaning. Now, in Exhibit No. 1, there are unquestionably openings through which something can be seen, through which a cutting operation can take place, and with that understanding of the meaning of the term "window", my answer is that I find at least two windows in Exhibit No. 1 mask.

XQ. 33. Will you tell me what they are?

A. The portions that I would designate as windows are these [opening] which are substantially encompassing the

end of the pattern of tubes for purposes of ornamentation, and there is a second one on that side (indicating).

XQ. 34. Now, the parts that you have referred to are the lower curved portions of the edge of the plate at the forward end of the die, those are the windows?

[fol. 684] A. Specifically, those are what I term windows. I will go a step further and point out that in this mask the entire opening or cutaway portion of the mask plate from which parts have been removed could, without much stretch of the imagination, be said to extend clear down to the rear or lower edge of the mask; however, that entire opening is not entirely for gauging purposes, as I understand this device.

XQ. 35. Well, do you find in this Exhibit No. 1 that the windows that you have referred to enclose the pattern and correspond with it in size and shape?

A. At least partially.

XQ. 36. Well, let us take the significance of the expression "enclose". What do you understand that to mean?

A. If I had a box without a lid and put something down in the box, I would say it was enclosed. If I put a fence around something or substantially around it, I would say that it was enclosed. It might be free to escape, but would still be substantially enclosed, at least.

XQ. 37. Well, that is your definition, and on that standpoint you say that the windows that you find in this device enclose the pattern?

A. I say at least partially enclose, yes, sir.

[fol. 685] XQ. 38. Well, you don't say you say—it is either enclosed or not enclosed. Does it enclose?

A. It does not completely surround at every single point. That is quite evident.

XQ. 39. Well, isn't there a definite significance in your mind of the expression "enclosed"?

Mr. Allen: Well, now, if the Court please, I object to the question. It has no pertinence to claim 6 which we are discussing. There is no such word in the claim. I cannot understand why the witness, on cross examination, should get off onto things of that type, because I think it is not a part of the direct.

Mr. Kingsland: I don't blame you for wanting to keep him off of it, because I am reading right back from the

Court of Appeals' opinion, and of course the witness knows that. Now, I want to get his views about it.

Mr. Allen: I don't think—

The Court: What difference does it make? We have a dictionary in here.

Mr. Allen: Yes.

The Court: What difference does it make what Mr. Riordon thinks the word "enclose" means? Who used the word? Has he used that word?

Mr. Kingsland: Yes, Your Honor.

[fol. 686] The Court: Why ask the witness about it?

Mr. Kingsland: Well, because—

The Court: Let's look in the dictionary, to see what the word means.

Mr. Kingsland: Of course I am limiting it to his consideration of this particular construction.

The Court: You asked him what he understood by the word "enclosed".

Mr. Kingsland: I did.

The Court: We sustain the objection to that.

Mr. Kingsland: Well, the only point, Your Honor, may I say this—

The Court: Did he say that was enclosed?

Mr. Kingsland: He said it was enclosed, partially enclosed.

The Court: Well, if he said that was enclosed, why that explains what he understands by the word enclosed. The word enclosed necessarily means, from his point of view at least, something that is partially surrounded, that is what the word enclosed means from his point of view. Now why go into it any further?

Mr. Kingsland: All right, Your Honor. I do not want to press it at all.

XQ. 40. Now, I am putting into this Exhibit No. 1 Plain-

[fol. 687] tiffs' Exhibit No. 34. Do you understand that that Exhibit No. 34 that has the ink mark on it is the work that is performed on that die?

A. Just off the record—

XQ. 41. (Interrupting) Or to be performed?

A. I want to get what you are driving at. Do I understand it is a piece of work that can be operated on by this die?

XQ. 42. Well, that that is designed to operate with.

A. I understand that this Exhibit No. 34 is a piece of work for which the die is designed to ornament.

XQ. 43. In other words, is it not true, Mr. Riordon, from your experience in this business, that each piece of work has a special die made for it, that is, in order that it may be lined up? A. Each run of work, yes, sir.

XQ. 44. Yes. And is it your understanding that that die was designed to operate so that it would gauge against an ink mark?

A. Gauge against an ink mark, or if it so happened that there were stitches in there and the design to be punched were sufficiently spaced from the stitching so there would not be any danger of spoilage, it could be engaged to that. As a matter of fact, this T-shaped portion might be very [fol. 688] readily shaped or designed to match up with the throat of the vamp. It does not happen to be in this particular instance, but it is curved slightly to indicate, and indicates that it could very readily have been thickened a little bit and have been longer, run to the line of stitching onto the edge of the vamp.

XQ. 45. Now, take this work that is placed in this die: Does it have any function at the sides to hold the work flat—apparently, to me, it does not even touch it—what I am asking you, whether you think that that could be—that piece of work could be set up in that die so that you would get the tension function?

A. That particular piece of work could not, quite obviously, because of its size, but shoes vary in size, a given run, and this particular die takes care of sizes 2 to 9, and is so marked. Now I will call attention to the fact that here are some tubes extending out beyond the edge of the work piece that is now in there, Exhibit No. 34, with a wider upper, with a larger size. It will be quite obvious that the edges would come under these side portions of

the mask. I do not see that that in itself is, for a small sized shoe, this small sized shoe, particularly necessary in this particular piece of work.

XQ. 46. Well, now, when you were comparing the structure of Plaintiffs' Exhibit No. 1 with the structure of [fol. 689] Defendants' Exhibits F, G and H, I believe you pointed out that because the tip of a shoe extended forwardly and was held along the toe line, that there would be a likelihood of that material curling up when it was put into the device.

A. Perhaps I should make myself clearer on that.

XQ. 47. Well, just let me ask you this: I think you did so testify. Now, have I arranged this Exhibit No. 34 in the die No. 1 in its proper operating position?

A. Yes, but not in the manner that there would be—would be comparable to an arrangement of the work in Exhibits F, G and H.

XQ. 48. Well, I will give you a chance to explain that, but is it not a fact that you do have in this instance just what you have pointed to in connection with Defendants' Exhibits, the projection of the toe part of the work piece from the edge of the toe, so that you get a tendency to curl?

A. But you do not have a part which is to be ornamented projecting so that it would have a tendency to curl. Now, you have not let me explain that. I could, if you will let me.

XQ. 49. Go right ahead.

A. On these pieces, F, G and H, the part of the work that is to be ornamented and that should be placed in a [fol. 690] relationship to the cutting edge that is such that it would not become distorted or pulled out of place, is the imitation tip. Now, in this Exhibit No. 34 and the die, Exhibit No. 1, it is that imitation tip that is being put in there; it is work behind the gauge, and that part of the work which is to be ornamented is the part of the work which is held against any possible distortion. If this tip in Exhibit No. 34 should happen to curl a little bit, so what? There is not going to be any ornamentation placed in there by this die.

XQ. 50. I think you have gone far enough with that. Now, where does Mr. Freeman's patent, that is, take this reissue that we are concerned with here, indicate that his

invention lies in clamping at the front of the work piece instead of at the back, is there any place in the patent that we can turn for that interpretation?

A. Without stopping to read the entire patent through, I can call your attention to Figures, for example, 2, 3 and 4, wherein the mask is shown positioned, hinged at the leading edge of it.

XQ. 51. Well, do you think that that structure is structure that is responded to in Plaintiffs' Exhibit No. 1?

A. So far as extending from a leading part of the die rearwardly toward the operator and over the zone of cutting action, there is a response. Of course this mask in Exhibit No. 1 is not hinged to the leading edge of the die. It is mounted otherwise.

XQ. 52. Well, in the Freeman patent, where there is a hinging of the mask, I presume that what you were referring to is the fact that that hinge kept the forward edge from going too far forward?

A. No, I did not make any such reference at all.

XQ. 53. Well, what I want to get at is this: As I understand, you attempt to distinguish between Plaintiffs' Exhibit No. 1 and Defendants' Exhibit F, for example, by saying that in F that the die part, when it was in operative position of the die, stuck forward in the die and would be likely to curl. Now I find the same situation here. I want to know from you, if I can get the information, of where in the Freeman patent shall I turn to the teaching, for the teaching, if it has any invention recited in that patent by reason of the fact that it was hinged at the front?

A. The whole point—the major point of that particular description which I gave is to the effect that it is the teaching of the Freeman patent that the mask will extend over the zone of cutting action and will afford certain advantages. Now, frankly, if you just mask the [fol. 692] exhibit all around, or if you hook it back in here (indicating) in some way so that it extends over the rear, up over the zone, I think that you have afforded much the same thing. Where I make the real distinction is the fact that Exhibits F, G and H don't go over the zone of action; they start behind and run away from it.

XQ. 54. Now, by crossing the zone of action, I take from what you said that you mean that there is an edge, an

edge of the gauge that goes forward to a point that would intersect the cutting tools.

A. Oh, of course not that broadly, Mr. Kingsland. It is where it partially surrounds a portion of the pattern of cutting edges in the zone of the cutting action. Just because there might be a finger going up one side, so that a line running transversely would intersect it, is something entirely different.

XQ. 55. Well, now, I want to call your attention to Plaintiffs' Exhibit No. 2. If we consider that die in its normal operative position, it is true, is it not, that the top plate is elevated from the stripper plate? A. Yes, sir.

XQ. 56. Now, if what you considered, as I believe you stated, was the interpretation of claim 6, if it is given the meaning that you conclude the Court of Appeals gave it, [fol. 693] then would you [that] that die, Exhibit No. 2, responded to claim 6 of the reissue patent?

A. Oh, I understood you to ask me—

XQ. 57. (Interrupting) Well, it is briefly this: Do you think that that die has the clamping function?

A. That die most assuredly—

XQ. 58. (Interrupting) The die, Exhibit No. 2.

A. The die, Exhibit No. 2, most assuredly has a clamping function. That function is not the full complete function as that of Exhibit No. 1. The work, with this die in its normal elevated unbroken condition, will be spaced sufficiently from the stripper plate to permit the placement of a piece of work beneath it and over the stripper or plunger designs. Before there can be any possible movement of the work to these tubes down below, the plunger is going to engage that plate. That plate is going to be depressed to the top of the work, and it is going to clamp that work against the stripper plate, whereupon the plate, the work and the stripper will undoubtedly move downwardly over the cutting edges, and there will be no slippage of the work while the actual perforating or cutting out is taking place.

XQ. 59. So you consider that Plaintiffs' Exhibit No. 2 embodies the structure of claim 6, even though a clamping [fol. 694] function be imported into that claim?

A. I think it comes within claim 6, and I think there is broadly a clamping function to this plate, which even in its original condition, operative condition, perforce must

come down against the work and clamp it against the stripper before the stripper will move down to the work and impale it on the tubes.

XQ. 60. Now, as to Plaintiffs' Exhibit No. 2, you understand that that clamping function which resides in that die can be the result of the operator putting pressure upon that upper plate and holding it in place?

A. Well, I don't see how an operator could get her hands back in here (indicating), when the whole plunger is going to come down in that zone, the operator could not hold that plate as constructed down against the work. The clamping will be effected by the plunger itself.

XQ. 61. Yes, and in that sense it does not have a manual clamping function? A. Correct.

XQ. 62. Now, until the plunger comes down on it, the work is free to move, is it not?

A. It depends on the thickness of the work, the clearance.

XQ. 63. Do you think you can get as accurate gauging with— A. (Interrupting) Sir?

XQ. 64. Do you think you can obtain as accurate gauging [fol. 695] with Plaintiffs' Exhibit No. 2 as you can, for example, with the Freeman mask?

A. You can obtain a sufficiently accurate gauging for shoe operation with either of those dies or masks. The exact degree of accuracy to a thousandth of an inch could probably be effected a little bit closer, a little bit easier, with the Freeman hinge type mask, where the operator is enabled to hold it with her fingers at the rear or operator's side of the structure.

XQ. 65. Well, that is your position on that. Now, let's see about the Plaintiffs' Exhibit No. 3-A. Have you sufficient information about that to express an opinion as to whether or not claim 6 defines that structure?

Mr. Allen: Well, there are two stipulations, and that is in one of them. Either one will do. They are about the same.

A. In Plaintiffs' Exhibit No. 3-A, in comparing it with claim 6, did you ask me?

XQ. 66. Well, we are confining it to claim 6 now, because I understand that is the only one.

A. I find a showing of a cutting die having cutting

edges for cutting designs in shoe upper material, that being, of course, exemplified by the rows of tubes shown in elevation in one figure, and in plan in the other figure. [fol. 696] A support for the die and a mask cooperating therewith, said mask being provided with one or more edge portions shaped to act as a gauge for the positioning of material beneath the mask.

XQ. 67. What is your conclusion then, that it does respond? A. That it does respond to the claim 6.

XQ. 68. And for the same reason as Exhibit No. 1?

A. Well, for the same reason that I find in reading claim 6, every element of the claim in that—shown in that exhibit, illustrated in that exhibit.

XQ. 69. Well, now, which portion of that do you consider the window, Plaintiffs' Exhibit No. 3-A, and will you mark it?

(The witness marks on Exhibit 3-A.)

A. I have now marked Exhibit No. 3-A, indicating the cut-out portion in the mask through which the work can be found, and that portion of the work to be cut can be seen, and through which the cutting operation will take place.

XQ. 70. Well, now, what would you say with the pattern of the ornamentation as indicated on Exhibit No. 3-A?

A. There is no work in there at all.

XQ. 71. Well, how can one determine where the work would be by looking at Exhibit No. 3-A?

A. I could not determine where the work would be, but [fol. 697] the pattern of ornamentation to me means something more than a series of holes in a stripper plate.

XQ. 72. Of course it does, but then you could tell what the work, the performing work would be by looking at that die, couldn't you? A. Yes, sir.

XQ. 73. Well, now, you see a general pattern of perforations indicated on that drawing, do you not? A. Yes, sir.

XQ. 74. Now, with reference to that, can you give us any indication of what you consider the pattern of ornamentation that would be performed on the work, using that die, Exhibit No. 3-A?

A. Considering, of course, that there may be additional structure in the work piece which might form or be a part of the pattern, some predetermined configuration, and referring exclusively to the die, that is, to the cutters of the

die, I will say that the six tear drops, three at each side, and the two curved rows of tubes, and the five substantially straight diverging rows of tubes, would all enter into and become a part of the pattern.

XQ. 75. Yes. Now, as placed in relation to the plate in this die, is it your view that the window that you have [fol. 698] marked encloses that pattern of ornamentation?

A. It at least partially surrounds that pattern of cutters.

XQ. 76. Well, is it not your understanding that you have an enclosure, distinguished from partially surround?

A. Well, Mr. Kingsland, didn't I go into that at length before?

XQ. 77. No, I don't think we did. We have got a different set-up here, and all I am asking you is a simple question, is whether or not the part you have marked on the Exhibit No. 3-A as the window, to state whether or not that encloses the pattern of ornamentation, as you understand this drawing?

A. It partially surrounds the die, the cutting edges of the die.

XQ. 78. Will you state, yes or no, as to whether or not it encloses, in your opinion?

Mr. Allen: Well, there we are back to the same thing I objected to before, if the Court please.

Mr. Kingsland: No, I don't think we are.

Mr. Allen: Precisely the same question.

The Court: Overrule the objection. I don't know.

A. The answer is, it encloses a substantial portion of the pattern but does not completely surround the entire pattern of tubes and cutters.

XQ. 79. Do you use "surround" there in the same sense [fol. 699] as you have used "enclose"?

A. I use it in the sense that it is—if it did completely surround it, it would completely enclose. If it would partially surround it, it would partially enclose.

XQ. 80. Now, was it your view, after a consideration of the opinion of the Court of Appeals for the First Circuit, that that Court concluded that the window of the clamp or mask was required to enclose the pattern of ornamentation, irrespective of whether one edge conformed to the pattern of ornamentation?

Mr. Allen: I object to the question again, if the Court please. Now he is asking the witness to interpret the Court of Appeals' decision. I have been objecting to that all along. I think there should be some end to the cross examination on this kind of a subject, not being part of the direct, or germane thereto.

The Court: Sustain the objection to the question.

XQ. 81. Is it your view that, regardless of whether the gauging is done in respect of an ink mark or a permanent part of the shoe upper, that it would still be within claim 6 of the reissue patent, that is, a structure that gauged against an ink mark and one that gauged against a permanent part of the structure, whether they both would be within the claim 6?

[fol. 700] A. It is my understanding that if the gauging goes to an ink mark exclusively, as distinguished from a line of stitching, or goes to a line of stitching, as distinguished from an ink mark, or goes to an edge of an overlying part of the work, as distinguished from the other two, or goes to some other predetermined configuration of the work, that that would all be within the meaning and the spirit of the claim. I cannot bring myself to believe that Mr. Justice Morton or any other reasonable person was doing any more, when he used the term stitch line, [then] giving that as an example of some predetermined configuration on the work, which might be a line printed on there as a guide for a subsequent stitch line to be placed on by an operator.

XQ. 82. Well, now, when you testified in the Premier case, you had that original patent before you that had this expression in it (I am reading from the bottom of page 1 of the patent, as in line 110, where it says:)

"A further important feature consists in the provision of a machine and operating instrumentalities which will enable the openwork designs or formations to be cut out entirely through the upper or upper and lining and without previously marking or forming any pattern on the work. This desirable result [fol. 701] I accomplish by the provision of work cutting and work holding means which will enable the cutting devices to be alined or positioned with regard to a

fixed edge or portion of the shoe upper itself; thus insuring the cutting out action with exact uniformity upon successive uppers of similar design.”

Now, you understood that there was that statement in the original Freeman patent?

A. If you just read it, of course it must be there.

XQ. 83. Well, what I want to get at is this: When you testified in the Premier case, were you acquainted with the original patent to an extent that you would know whether or not that statement was in there?

A. I was acquainted with the original patent, of course, but I should like to read that statement, so that I can follow it with my own eyes, rather than just listening. I can get it better that way.

XQ. 84. Yes, I want you to.

A. Now, where does that begin?

XQ. 85. It begins in line 110.

A. And down how far—as far as you have marked?

XQ. 86. Down to the paragraph here (indicating).

[fol. 702] (The witness examines the document.)

The Court: Shall we stop here for the night?

Mr. Kingsland: Yes, sir.

The Court: All right. We will stop at this point.

At this point, on Thursday, February 8, 1940, an adjournment was had until 10:00 o'clock A. M., Friday, February 9, 1940.

Pursuant to the said adjournment, the Court convened at 10:00 o'clock A. M., Friday, February 9, 1940, and the following proceedings were had:

The Court: You may proceed, gentlemen, with the case on trial. Do you think we can conclude this matter today, gentlemen?

Mr. Kingsland: I think so, Your Honor. I won't have very much more for this witness, and the proof on the counterclaim will be relatively short.

The Court: All right.

Mr. Kingsland: I will make every effort to shorten it.

Cross Examination Resumed.

By Mr. Kingsland:

XQ. 87. Mr. Riordon, at the close of the session yesterday [fol. 703] day, I had referred you to the statement beginning in line 110 of the original Patent No. 1,681,033. Was it your understanding at the time you testified in the Premier case that there was a distinction from the prior art by reason of the fact that the gauging could be accomplished with the Freeman construction without previously marking or forming any pattern on the work?

Mr. Allen: I object to the question, if the Court please. No part of the witness' direct testimony in any way, and now there branches clear off into what this witness may have talked about in the Premier case. Now, counsel would like to examine this witness about anything he ever said, but it must be germane to the direct examination and germane to the issues in this case.

The Court: Overrule the objection.

The Witness: Repeat the question, please.

(The question was repeated by the reporter.)

A. That would be one of perhaps several distinctions.

XQ. 88. Now, as I understood you yesterday, that you indicated that you did not think that Judge Morton, who wrote the decision, would be so foolish as to draw that as a distinction over the prior art, namely, gauging against a line as distinguished from a work mark.

A. I don't believe I said that Judge Morton would be [fol. 704] foolish or used that language. However, what I tried to bring out by that statement is this: Where a mark is placed on the work as a part of the normal operation of making that shoe, wholly aside from any question of gauging, and that is a printed mark placed on the shoe as a guide line to an operator for subsequent stitching or for subsequent location of parts relative to each other in the makeup of an upper from several blanks, such as the quarter and a vamp, and where that mark is, therefore, something that is not placed in the work solely for the purpose of permitting a gauging, then I say that that is something which distinguishes from the prior art, for this reason: it was very common, prior to Mr.

Freeman, to perform a separate operation, such as the placement of prick marks or stabbings in the work, solely to enable that piece of work to be gauged for some purpose or other, which stabbings represented an extra operation not entering into the makeup of a shoe. The Freeman invention eliminated that extra operation. Now if, instead of putting a printed marking on there or having put a printed marking on there as a guide to an operator and then subsequently placing a line of stitching along that marking, and then the upper turned over to the operator who is going to do the perforating, it would be [fol. 705] immaterial, to my personal standpoint whether it was a printed marking or the stitching that would go on that printed marking that is used as a part of the work for gauging purposes.

XQ. 89. Now, Mr. Riordon, with respect to this exhibit, Plaintiffs' Exhibit No. 34, to put the ink marking on that work piece, it is necessary to put that on by a separate operation, is it not? Well, just answer that.

A. At the present day, no. Several years ago, I believe it would have been a separate operation.

XQ. 90. At the time of the Freeman invention, it was a separate operation?

A. At the time of the Freeman invention involved in No. 1,681,033, it was a separate operation.

XQ. 91. Now, your distinction is, as I get it, your last testimony, that if the upper is made up and those ink marks that appear on this upper are put on there in such a position that thereafter stitching follows those marks, and the marks previous to the stitching are used as the reference lines to guide or gauge the work on the cut-out, that it is still the Freeman invention?

A. I think you understand—

Mr. Allen: (Interrupting) What is the Freeman invention? I do not understand the question, if the Court please. The Freeman invention is in regard to a die.

[fol. 706] Mr. Kingsland: I am referring to Plaintiffs' Exhibit No. 34. Oh, Mr. Allen, you know, you know the situation. You don't have to say anything to this witness. He knows all about it.

Mr. Allen: I did not ask the witness any questions of this type at all.

The Court: Please answer, Mr. Witness, if you can.

A. I think you understand what I am trying to explain. The printed markings on Plaintiffs' Exhibit No. 34 were not placed there as an independent operation solely for the guidance of an operator who is going to perforate this work. Whether there was any perforation to be placed in the work or not, it would be immaterial, so far as the placement of those printed markings on Exhibit No. 34 are concerned, because, as is quite evident from Exhibit No. 36, there are lines of stitching which conform to the printed markings; in fact, on this Exhibit No. 36, you can still see traces of the [inking] marking placed there as a guide for the stitching operator. Now, that is marked, that is going to be in the work, that marking used, whether it is perforated or not. The Freeman invention, as I am using your words, takes advantage of that configuration of the work, that is, the marking which is later stitched, for gauging purposes, and eliminated the need for putting [fol. 707] separate stabbings or a separate marking solely for gauging purposes to enable a perforator to locate the work.

XQ. 92. Mr. Riordon, you testified, of course, in the Premier case, and I am going to call your attention to this statement:

"Specifically, Freeman provides in his unitary structure a clamp, plate or mask which is provided with an opening, one or more edges of which may be utilized to accurately locate the work by reference to some fixed part of the work. By so doing he is enabled to obtain uniformity between a number of pieces of work cut on the same machine. That fixed part of the work might be the outline or the edge of an applique foxing, or some ornamental portion of the upper. It might be a row of stitches. It might be an edge of the upper or an edge of some part of the upper. But it is something which is in the shoe and which does not require a pre-marking of the upper as a separate operation."

Now, how do you distinguish that testimony, or how do [fol. 708] you reconcile the testimony that you there gave in the Premier case with the testimony that you have now given with respect to the marking on this upper?

A. I think what I have said there and what I have just said now are exactly in accordance. Which is just exactly what I am trying to bring out, that here we put a marking for stitch lines in the work. Now, if you have a given run of shoes, you are going to put that same marking on every upper. It becomes, for that purpose at least, a fixed part of the work, so that every subsequent piece of work in that run will have the same stitching and the same appearance. In other words, every shoe in that particular run on that size is going to be the same as its predecessor and its successor. And I also stated in just that paragraph that you read that in effect—I do not know what the exact words were—that eliminated the need for a separate marking operation which is solely for gauging purposes.

XQ. 93. In other words, you consider that because the marking on this exhibit, Plaintiffs' Exhibit No. 34, in addition to being the reference marking for the gauging of the work during the cut out, and is later used for a seaming mark or stitch mark, that you have something that distinguishes from what you were speaking of in this [fol. 709] Premier record, is that your position?

The Witness: Mr. Reporter, will you read that, please? It is a little involved.

Mr. Kingsland: Oh, you understand that question, Mr. Riordon.

The Witness: I understood you to say that this is something different from what I am testifying in the Premier case.

XQ. 94. Yes.

A. Wait a minute. Will you now read the question (addressing the reporter)?

XQ. 95. To save time, I will put it to you again.

The Witness: Let him read the question.

XQ. 96. Mr. Riordon, I will break it up for you. On Plaintiffs' Exhibit No. 34, if, by a separate operation, ink markings were put on, and thereafter those ink markings were used as the reference lines for gauging the work in a perforating operation, and nothing more, would you say that that was what you were referring to in the Premier record?

A. If I understand your question, my testimony in that part of the Premier record which you just read is to the effect of my testimony right now, namely, that if those markings are placed on the work and thereafter used for gauging, that that is something which would be included as a part of the work from which the gauging could be effected.

[fol. 710] XQ. 97. Well, now, will you tell me what you had in mind, specifically, when you said that the part—I am paraphrasing—part of the shoe upper against which the gauging was to occur, in accordance with the Freeman invention, is something different than an operation in which the shoe requires a pre-marking?

Mr. Allen: Page?

XQ. 98. Of the upper.

Mr. Allen: Page?

Mr. Kingsland: I am paraphrasing my understanding of page 98. And again on page 110, on cross examination he repeats the same thing in answer to XQ.[—]

The Witness: Where on page 98? “Specifically, Freeman provides in his unitary structure a clamp, plate or mask?”

XQ. 99. That is right. And then your answer to XQ. 16, on page 110.

A. 110, was that? Cross what? 110, Cross Q. what?

XQ. 100. XQ. 16. A. Question?

(The question was repeated by the reporter as follows:

“Well, now, will you tell me what you had in mind, specifically, when you said that the part—I am paraphrasing—part of the shoe upper against which the gauging was to occur, in accordance with the Freeman invention, is something different than an operation in which the shoe requires a pre-marking?”)

A. My answer to cross Q. 16, page 110 of the transcript of record in the Premier versus Freeman, fully answers your question, I believe, and I will read it, if you want me to.

XQ. 101. No, there is no use; if that is your answer, let it go. Now, let me ask this: Let us take, for example, Plaintiffs' Exhibit No. 1, and we will take as a comparable

exhibit, Defendants' Exhibit H, and will you tell me whether your sole distinction between "H", insofar as the gauging plate is concerned, is that it is your conception that Plaintiffs' Exhibit No. 1 crosses the zone of action or zone of cutting, is there any other difference?

A. I gave, I believe, three.

XQ. 102. You gave three functional differences. I am asking you from a structural standpoint.

A. Well, as I explained yesterday, the mere fact that some part of the mask might cross the zone of cutting action is wholly beside the point. It makes no difference, one way or another. For example, in Exhibit H, if you were to extend fingers up this way (indicating), and they [fol. 712] had perhaps no actual function of the purposes of these dies, maybe it would be for the purpose of making an ornamental or a pretty design, or maybe it might be to give some little holding function to the side of the work. That would not fit the bill. But when you have a mask in which parts of that mask partially surround the zone of cutting action, hold the work perhaps fairly adjacent to the zone of cutting action, protect the work from possible scarring, and serve in that part that partially surrounds the cutting zone for the purposes, that is the distinction over these sheath gauge dies, Exhibit H, and the like.

XQ. 103. Well, as I understand, you say that Exhibit H, Defendants' Exhibit H, does not have any part of an edge of the gauge that surrounds any part of the work or partially surrounds any part of the work?

A. If I have not made myself clear, I will try to. The zone of cutting action in Exhibit H is really a two part affair. You have a row of tubes extending across the tip line, and you have a cap line. Now, so far as that cap line, it is the main part of the ornamentation, of course there is nothing that attempts to surround that. Now, you have a curved edge, of course, which generally follows the contour of this row of tubes, not for gauging [fol. 713] purposes, but for clearance purposes, perhaps. This curvature is essential, because when you have a flat tip blank and you are eventually going to toe last it in, you will notice, if you go to take a tip and toe, last it and get a straight line across the tip in the lasted shoe, then go to take that tip out of the shoe and straighten it out,

it would have a curve line, perforce, and this way there is a curvature here in this gauge.

XQ. 104. Well, now, let us get down to structure, Mr. Riordon. If we eliminate from this die, Plaintiffs' Exhibit No. 1, the central T-shaped plate, and I eliminate the side wings from that gauge, does that differentiate from Defendants' Exhibit H?

A. Not as much as it does now.

XQ. 105. Well, does it at all?

A. It would differentiate, indeed, and if it is on the leading edge of the die, and extending relatively, to which I ascribed a function yesterday, and it would afford some little more protection in a gauge of this sort, but where you are approximating—I will anticipate your question, Mr. Kingsland—where you are approximating—

XQ. 106. (Interrupting) You don't have to anticipate. Just answer my questions, please. You can answer them, [fol. 714] with full explanation, but don't anticipate anything. A. All right. That is the end of my answer.

XQ. 107. All I want to know, is structurally we change Plaintiffs' Exhibit No. 1, take off that T-shaped member in the center and remove the wings at the side, and continue the curve around, whether we then have Defendants' Exhibit H?

Mr. Allen: If the Court please, is that a proper question to propound to a witness in this kind of a fashion? In other words, was he trying to describe some structure of the defendant and find out whether the plaintiff in this case accuses it of being infringed, by virtue of asking a cross question of the witness on the stand? I don't think that is exactly fair.

Mr. Kingsland: Your Honor, I am trying to get a structural [interpretation] of what this witness means.

The Court: Answer it if you can. If you think the question is not clear or intelligible, why tell Mr. Kingsland so.

The Witness: Well, at least the question is not clear.

XQ. 108. Mr. Riordon, assume that you remove the T-shaped central part of the gauge on Exhibit, Plaintiffs' Exhibit No. 1—you understand what I mean by that?

[fol. 715] A. Yes, sir.

XQ. 109. And you then remove the wings on the gauge at each side that extend forward from the edge of the plate? A. Yes, sir.

XQ. 110. You understand that? A. Yes, sir.

XQ. 111. Do you then have a structure that differentiates from Defendants' Exhibit H?

A. Yes, sir, in the respects that I mentioned a moment ago.

XQ. 112. Will you restate those?

A. You have a guage which is positioned at the leading edge of the die, extending toward the zone of cutting action, which affords at least the advantage that I mentioned yesterday of preserving the work in its alined condition in the zone of cutting action as the die is pushed beneath the plunger.

XQ. 113. Let me stop you there just a moment. Do you find any structure or function defined in the claim directed to that feature?

Mr. Allen: I object to the question.

The Court: Overrule the objection.

XQ. 114. In claim 6, I am referring to.

Mr. Allen: Claim 6 is partially surrounded.

A. Specifically, no.

[fol. 716] XQ. 115. All right. Now then, that is the first difference. Now, what are the other two?

A. Well, claim 6 calls for—

XQ. 116. (Interrupting) No, no. You have answered that question. You said there were three differences between the structure as modified from Plaintiffs' Exhibit No. 1 as compared with H, and you have given me one, namely, that the shoe pieces in Exhibit No. 1 may come forward in the die and will not crumple the toe piece, as I understand.

A. Will not crumple the work at the point where it is being operated on. I do not care what happens to something that we are not treating.

XQ. 117. All right. Then what is the next difference?

A. That it would hold the work adjacent to the zone of cutting action and thereby produce the several advantages.

XQ. 118. Well, now, just let me stop you on that. Hold the work adjacent to the zone of cutting action. You are

taking in view that the wings at the side are eliminated in this structure that I am speaking of and that the "T" edge of the plate is removed.

A. How far back on the stem of the "T" are you going to remove that?

XQ. 119. Oh, I will take it back to a line at the—we can indicate it on your—

[fol. 717] A. (Interrupting) Back to the point of the wing?

XQ. 120. Yes. You can take it back that far.

A. Wing tip, I should have said there.

XQ. 121. Yes. A. What was the question?

Mr. Kingsland: (Addressing the reporter) You will have to repeat it.

(The question was repeated by the reporter.)

XQ. 122. What I was trying to do was this: let me restate it. As I understand your statement, you were speaking of a structure in which the function that resulted was because of the wings on the guide plate of Plaintiffs' Exhibit No. 1, that last feature, or maybe I misunderstood you. Restate then the second reason that you say that this Plaintiffs' Exhibit No. 1 with the removal of the wings and the T-shaped part would be different from Defendants' Exhibit H?

A. You will recall that yesterday I pointed out that the wings at the side or flanges extending downwardly, while definitive of a cut out opening or window, on the particular uppers, Exhibits Nos. 34 and 36 did not actually engage the sides of the upper, although they perhaps would in a larger size shoe. That "T" portion, of course, is more important in that respect, in that it actually engages and holds flat a part of the work at points opposite to [fol. 718] and somewhat remote from the main outline of the opening in the mask.

Now, getting back to what you have just asked me, I gave as the second function that the work was held adjacent the zone of cutting action. Now, that will still be true to some extent, not as great an extent, if the side wings, which don't hold the exhibits Nos. 34 and 36 in any dies, are eliminated, and if this "T" is cut down or cut off to the point defined by the center of the wing tip in the Exhibits Nos. 34 and 36.

XQ. 123. Well, if we simply remove the "T" of this exhibit, Plaintiffs' Exhibit No. 1, and leave the wings, you then say that the gauge edge partially surrounds the work?

A. Yes, sir.

XQ. 124. Now, one of the features, as I understand, is that where you have a partial surrounding of the work, on your conception of the matter, that you have a tensioning or stretching of the work within that area; isn't that one of the features of the partial surrounding?

A. Perhaps a better way of stating it than the wording of your question would be flatwise. This particular die is not an anvil die, about which you will tension and hold [fol. 719] taut a piece of work, so that the tension part lays flatwise. However, taking a fitted upper, as Exhibit No. 34 or No. 36, where there can be no actual draping in this particular die, and holding it, there will be a tendency, especially with a fresh upper that has not been mashed flat for some years, as in the case of this exhibit, for that upper to bulge or buckle in the center part where the normal spring of the upper occurs, so that in placing this particular Exhibit No. 34 and assuming normal conditions, it is desirable to hold that work not necessarily under strict tension created by the operator, but to hold it smooth and flatwise.

XQ. 125. Well now, in the Freeman—

A. (Interrupting) In the zone of cutting action. Just add that.

XQ. 126. In the Freeman die, where you have a full window with the mask, such as we have before us, you do get the full effect of the tensioning action in the zone of cutting?

Mr. Allen: (Addressing the witness) Do you want that piece of work, Russell?

The Witness: I want that die.

Mr. Allen: Oh, this die and this work (indicating)?

The Witness: The work is not necessary, Question?

(The question was repeated by the reporter.)

[fol. 720] A. There are some types of work, of which Exhibit No. 48 is an example, which it is very difficult to treat on a flat bed die, and that is one reason for the

use of anvil dies. With such a piece of work, when placed over the anvil, the operator will grab it at the sides and give him a flatwise condition, and then the mask will be placed over and hold it in that condition, but with an upper such as Exhibit No. 34, it is feasible to treat the upper on a flat bed die, such as Exhibit No. 1, without the specific tensioning or tautness which might be required in another type of work.

XQ. 127. Well, the point is that in the anvil dies, in which we have a full window that surrounds entirely the work, that you do get a fuller performance of that tensioning function than you would on a die such as Plaintiffs' Exhibit No. 1, isn't that true?

A. Not because of the window. In this Exhibit No. 47, it is quite evident that the gauging portion of the mask does not completely surround the work, as in the case of Exhibit No. 13. The entire back part of the mask in Exhibit No. 47 is spaced from the gauging portion, and while it has certain curvatures there that outline perhaps some parts of the work, it is, in effect, a separate element. Now, [fol. 721] the tensioning is produced in this type of die, Exhibit No. 47, by virtue of the fact that there is an anvil about which you can drape the work, with one portion of the work to be made, held flatwise, and other portions of the upper draped at the sides in the space provided for that purpose.

XQ. 128. In other words, in the anvil die, as I now understand your testimony, the mask itself is not necessary for the tensioning.

A. I did not say that. I said—you asked me the question if the mask was what produced the tensioning and the tautness.

XQ. 129. Now, as I read your testimony in the Premier case—I am not stating this to be a conclusion about it—I am just using it for the purposes of the question—you testified that by reason of the fact that you had a complete surrounding of the work, that it flattened out the area within the edge of the window. That was your position, was it not?

A. My position, as I recall it, was that the work was flattened out by the operator and then retained in that flattened condition by the mask.

XQ. 130. Yes, and you considered that an advantage in

the particular mask in which you had a complete surrounding of the area that was to be perforated?

[fol. 722] A. You see, we have to consider the type of work with which we are dealing. There are some types of work that you could not just lay flat and they would stay that way.

XQ. 131. Well, that does, in some types of work, have an advantage? A. Yes, sir.

XQ. 132. That is the idea that it entirely surrounds and holds the work flat within the zone of action?

A. It is not necessary to entirely surround, but to substantially surround or partially surround a part of the work. I illustrated that by virtue of this Exhibit No. 47, where quite obviously the part of the work which is being gauged is not entirely surrounded, and yet the Exhibit No. 48—

XQ. 133. (Interrupting) Well, just pay attention to this, because that exhibit is not one that I am talking about.

Mr. Allen: Let him finish.

XQ. 134. I am talking about this Plaintiffs' Exhibit No. 13.

Mr. Allen: Well now, if the Court please, I think the witness has a right to complete his answer.

Mr. Kingsland: Oh, yes, let him go ahead.

Mr. Allen: He is your witness, really, on this, I think.

The Witness: I am not trying to argue with you, [fol. 723] Mr. Kingsland. I am trying to give you my understanding of what I testified in Premier, in view of the fact that you are giving your understanding. Now, my position is this:

XQ. 135. (Interrupting) Let's shorten it up. Let's get away from that. Let me just ask you this: In this die, Plaintiffs' Exhibit No. 13, we have the window entirely surrounding the part to be ornamented or to be cut through, isn't that true?

A. May I see the exhibit—I think it is 14? Now, what is that question.

(The question was repeated by the reporter.)

A. Yes, sir.

XQ. 136. Now, does that perform this flattening or tensioning function to any greater degree than that function would be performed by Plaintiffs' Exhibit No. 1, that function of tensioning or flattening?

The Witness: Repeat that.

(The question was repeated by the reporter.)

A. As I explained before, the outline of the opening, whether it surrounds the work completely or not, does not perform any function of tensioning the work.

XQ. 137. Well, let's use the term flattening then, if you prefer it, or holding it flat.

[fol. 724] A. Naturally, the more points at which the work is engaged by the mask, the better the function of holding the work flat will be effected.

XQ. 138. Well, your answer then is that Exhibit No. 13 does perform that function of which we are talking better than does Plaintiffs' Exhibit No. 1?

A. Exhibit No. 13 has a very small opening surrounding a very small cut-out, and in that particular piece of work it will naturally hold it flatter in the total area [then] would be the case with a big cut-out, as shown in Exhibit 1 and Exhibit No. 36.

XQ. 139. No, Mr. Riordon, you know that I am asking you to compare the degree of the holding function of a mask that entirely surrounds the area to be ornamented and one such as Exhibit No. 1, Plaintiffs' Exhibit No. 1, that partially surrounds it. Now, is there any difference in the performance of that function, between those two structures?

A. You are not making a fair comparison, Mr. Kingsland. You show me a mask with a very small hole, about an inch and a half long and an inch wide. You show me for comparison a die which has a cut out spread of—

(The witness starts to measure.)

Mr. Rogers: Guess at that.

The Witness: I am answering the question, Mr. Rogers. [fol. 725] (The witness completes his measuring.)

A cut-out spread of an average of seven inches cross-wise and three inches from front to back, and then you ask me if the fact that that small opening in Exhibit No.

13 is completely enclosed does not hold the work better than the various little points on the mask of Exhibit No. 1, which partially encompass a piece of work seven by three.

XQ. 140. You did not understand my question, evidently, Mr. Riordon. My question is simply whether or not an edge that partially surrounds, as compared with an edge that entirely surrounds, performs the holddown function better than or to an equal degree?

A. The answer is in the question. Obviously a piece that completely surrounds will hold down more completely than one which partially surrounds.

XQ. 141. All right. There was another function that you have mentioned, with respect to the entire masking of the work, except for the area to be ornamented, and that was, as I understand, the protection of the work. You referred to that yesterday, and I think you also referred to it in the Premier case. Now, take a die such as Plaintiffs' Exhibit No. 1, and forget the dimensions of it, and simply look at it from a structural standpoint. Does that die perform that work protective function as efficiently as [fol. 726] does a die in which the edge of the window entirely surrounds the area to be ornamented?

A. Substantially so, because of the thickness of the plate extending over the zone of cutting operations will have the same effect substantially as if it completely surrounded the work. In that respect, it is the extension over the zone of cutting action that produces the effect of protecting the work.

XQ. 142. Now, is it your conception of the structure, as defined by claim No. 6, that the gauging has to be accomplished by an edge internal of the opening or the partial opening in the gauge plate?

A. May I answer that question, Mr. Kingsland, by referring you to—

XQ. 143. (Interrupting) Do you want this (indicating)?

A. Yes, sir. Plaintiffs' Exhibit No. 15, held by the Court of Appeals for this, the Eighth Circuit, as within the terms of that claim?

XQ. 144. And that is what you are relying on, rather than an interpretation of the claim itself?

Mr. Allen: Well—

Mr. Kingsland: (Interrupting) I simply would like to get your own view as to whether or not we have, for example, since you have brought this exhibit to my [fol. 727] attention, Plaintiffs' Exhibit No. 15, whether we have in that exhibit a gauge plate that partially surrounds the work to be cut.

A. I find the gauge plate which partially surrounds the work to be cut.

XQ. 145. And do we find an edge, an internal edge that acts as a gauge?

A. The claim does not recite an internal edge.

XQ. 146. No. I am just asking you whether we do find an internal edge that acts as a gauge.

A. I do not see that it makes any difference whether it is an internal or external edge. It is an edge of that gauge plate.

XQ. 147. Well, now, are you speaking simply from the standpoint of the decision of the Court of Appeals of the Eighth Circuit in respect to this Exhibit No. 15 when you say it does respond to claim 6?

A. That is my personal view, regardless of any decision of any court.

XQ. 148. Well now, with respect to the language of the Court of Appeals for the First Circuit, if we interpret claim 6 in view of that language, is it then your view that that claim would describe Plaintiffs' Exhibit No. 15?

Mr. Allen: May I hear that question?

[fol. 728] (The question was repeated by the reporter.)

A. It is my view that that claim would describe Exhibit No. 15.

XQ. 149. Giving effect to the language of the Court of Appeals for the First Circuit.

Mr. Allen: I think if the witness wants to look at the decision of the Court of Appeals and study in regard to this answer, there is no reason why he should not do so.

Mr. Kingsland: I would be glad for him to do it, Mr. Allen, I think if you ask a witness a question like that, you ought to give him a week to answer it.

Mr. Allen: I think I am going to object to that question,

if the Court please. I do not like to keep objecting. It seems to me we have gotten tremendously far afield now. We are asking this witness to construe a claim of a patent in regard to an exhibit in case 8962, in view of the decision of the Court of Appeals of the Eighth Circuit and of the First Circuit. It seems to me that is entirely outside of a proper line of examination of the witness, and solely within the province of the Court to decide such things.

The Court: Overrule the objection.

A. If the language of the Court of Appeals of the First [fol. 729] Circuit is followed literally, word for word, and without that reasonable range of equivalents which every court in the United States will give to the language of a claim and to the interpretation of a claim, and if the structure is held down to the last dotted "i" and the last cross of a "t", then it is questionable in my mind whether this would fit within the terms; but I cannot bring myself to believe that the Court intended to exclude a structure in which any reasonable man would do exactly the same work, in the same manner, by a structure that looks a little different, and merely because a window is turned inside out so that the edges are external instead of internal, would not, in my opinion, take that away from a reasonable construction of the Court of Appeals of the First Circuit's opinion.

XQ. 150. Well, is your answer yes or no on the question of whether or not the Plaintiffs' Exhibit No. 15 is described by claim 6, in view of the decision of the Court of Appeals of the First Circuit?

A. That question cannot be answered yes or no, without an explanation such as I have just given.

XQ. 151. All right. Now, the exhibit, Plaintiffs' Exhibit No. 47, and the work, Plaintiffs' Exhibit No. 48, as I understand, when you testified yesterday, was an exhibit [fol. 730] that was put in the District Court on the contempt proceeding. A. Yes, sir.

XQ. 152. Is that right? Now, were there other exhibits put in at the same time?

A. There was a duplicate of this die exhibit, when it was for the other side of the shoe, one right and one left.

XQ. 153. And there were other accused structures that were presented at the same time?

A. It is my recollection that this is the accused structure, this and its mate (indicating).

XQ. 154. Only?

A. I would have to refresh my memory by looking at the record, but that, I think, is all that was accused.

XQ. 155. Well, have you got—

Mr. Allen: (Interrupting) I will say, in answer to that, Mr. Kingsland, I know what you are asking about, I think. The decision in 26 Federal Supplement, Judge Brewster says, "I am considering this one exhibit".

Mr. Kingsland: That is right.

Mr. Allen: That is what he said, and that was all he would consider.

Mr. Kingsland: That is right.

Mr. Allen: I will say now, for this record that the defendant in the Premier case filed some kind of a paper [fol. 731] —I cannot describe it in detail—in which they said, "Well, can I do this? Can I do that? Can I do the other thing, without coming under the decree?" And Judge Brewster refused to pass on those.

Mr. Rogers: Don't you think it would be better to have that paper in, so that the Court would know?

Mr. Allen: I don't think that paper could possibly be directed to this case.

Mr. Rogers: But you just referred to it.

Mr. Allen: I withdraw my statement.

Mr. Kingsland: The gist of the matter, Your Honor, was that the Exhibit No. 47 is introduced here in this case to show an interpretation of the Court of Appeals' opinion, and that what was held to be any contempt feature then merely went down. Now, as a matter of fact, the pleadings in that case show that that was substantially a consent decree. Now, there were also other exhibits in that case, that I understand were excluded from the contempt proceeding. Now, it seems, therefore, that I have a right to ask this witness about how it resulted that this die, Plaintiffs' Exhibit No. 47, was held to be within the decree.

Mr. Allen: Well, now, let's see. I think I have got one thing here, and that is the printed record—I mean [fol. 732] the transcript of the testimony and the evidence

before the Master in that contempt. I will be glad to put that in. Would you like me to?

Mr. Kingsland: Well, if you will put the whole proceeding in.

Mr. Allen: The whole transcript of the proceeding?

Mr. Kingsland: And also the proceeding in the Court, the District Court.

Mr. Allen: Why, there is a motion for order to show cause. Do you want it? Do you want the record then, may I ask?

Mr. Kingsland: I don't know what is in the record. I think the only pertinent matter was to show in this record what was actually before the Court down there.

Mr. Rogers: Specifically, there are two papers, Colonel.

The Court: Well, I do not know why you want to press that matter. It is a question that the matter be given consideration, but—

Mr. Rogers: Well, if the Court pleases, the Premier Machine Company filed a paper which, in our opinion, indicates that they consented to having that die decreed under the patent, provided that certain other things were not done, and there is a paper here entitled "Defendant's [fol. 733] Amended Answer to Plaintiff's Order to show cause why Defendant should not be adjudged in contempt", filed in the Premier case, which brings that out. That was the paper we had in mind.

The Court: Are you offering that in evidence, going to offer it in evidence?

Mr. Rogers: Would there be any objection to offering that? It is not a certified copy. In fact, it is just a type-written copy.

Mr. Allen: Let's see it.

(Mr. Allen examines the said document.)

Mr. Kingsland: Well, while they are examining that, let's go on with this, if we may. Can the ruling on that be reserved?

The Court: Oh, yes.

XQ. 156. I would like you to look at Plaintiffs' Exhibit No. 1 and compare it with this exhibit, Plaintiffs' Exhibit

No. 18, and I would like to ask you, with respect to whether you consider that the work is protected by the mask of Plaintiffs' Exhibit No. 18 to any greater extent than it is in Exhibit No. 1? A. Can I have the question read?

Mr. Kingsland: Yes. Read it to him (addressing the reporter).

(The question was repeated by the reporter.)

[fol. 734] A. This piece of work in Exhibit No. 18, is that an exhibit?

XQ. 157. Here it is (indicating).

A. Plaintiffs' Exhibit No. 19?

XQ. 158. That is right.

A. You are referring, Mr. Kingsland, to the entire work piece, are you, or just to the portions which are being cut?

XQ. 159. No; I am going back to that theory that where the mask has a window, it protects the work. I am using it in the same sense that you used it.

A. Well, in the sense that I used it was that so far as any part of the work which comes to a plunger is concerned, the mask will protect the work, and I asked for an explanation of your question, because in Exhibit No. 34, there is quite a bit of work, of the work piece which extends rearwardly out of the zone operations. Now, so far as the portion of the work to be ornamented or concerned in the two cases, I would say that the protection to which you refer is very comparable.

XQ. 160. Now, as you testified yesterday, you used this exhibit, Plaintiffs' Exhibit No. 47, you used with it the work piece, Plaintiffs' Exhibit No. 48. As I understood, you were exemplifying the work that was done on the die, were you not? A. Yes, sir.

[fol. 735] XQ. 161. In other words, is it your testimony that the work piece No. 48 is a piece of work that can be performed upon the die No. 47?

(The witness demonstrates.)

A. There were two exhibit dies, a right and a left, in this Premier contempt proceedings, but I would say that this piece of work, Exhibit No. 47, was designed for use with the other die. It just so happens I make that statement,

because as I place this in and gauge it, I can see through the openings of the work that the tubes there beneath do not coincide; however, for the purposes for which I use this work, solely the demonstration to illustrate to this Court how the work would be gauged, I think that this piece of work is satisfactory. We obtained this die very much in a hurry, and they sent us only the one exhibit, instead of both the right and the left.

XQ. 162. Suppose you turned it inside out, wouldn't you make the right and left?

A. I don't know. I don't know whether it would engage with the size of the openings in these tubes.

XQ. 163. The point of the matter, Mr Riordon, is that that die was never designed to cut that work; isn't that true? A. To do this type of work.

XQ. 164. Well, this was not the work that was done on that die?

[foi. 736] A. This particular upper illustrates very effectively how the work would be used and gauged, and so on.

XQ. 165. Well, isn't it true, and you told me yesterday I believe, that each of these dies are made up for particular types of work, different types of work?

A. They are, but the work will vary in size and will vary—let me put it this way: sometimes have a complete run of shoes where the sizes will run from, we will say 2 to 14, or 2 to 13, it will be necessary to have that series of dies with the same general pattern, but little different in size and proportion to take care of the difference in the work; however, the style, the type of work is done the same, right straight 'on through.

XQ. 166. Did you match the design in this work piece with the design in this die, and also the strap marks, can you say that it is work that was performed on that machine, on that die? The whole point of the matter is, can this die that you have before us make that work piece? I mean, of course, the ornamentation in the work piece.

A. Not in the exact dimensions and proportions of this particular work piece, but it will do this type of work, as is quite obvious from the pattern of tubes laid out in the die and the pattern of the work.

The Court: Does it take an operator as long to arrange [fol. 737] these things in the operation of the machine as it does here?

A. No, Your Honor. I had an experience along that line some years ago when I was learning how to use these machines, and I was in a shoe factory cutting out work, and at that, I had proceeded in my education, as it were, at that stage sufficiently that the work I cut out was later made into shoes and sold on the market, and the operator said to me, said:

“Mister, are you getting paid a salary, or do you work piecework?”

And I said I was on a salary, in effect, and she said:

“I am certainly glad, because you would starve to death.”

But these girls are doing this day in and day out, and they will be working on the same kind of work, and they just shove them in, shove them out, shove them in and shove them out with incredible speed.

XQ. 167. Now, as a matter of fact, Mr. Riordon, this work piece does not have the same position of holes, does not have the same number of holes in the strap and does not line up properly with the openings in that die; isn't that true?

A. This particular work piece, as I have said, quite evidently was not made on this exact die, but it is the type of [fol. 738] work and the type of die which go together. I can look through these holes, as I just pointed out, and see that the tubes definitely don't coincide.

XQ. 168. Yes.

A. There are five tubes in the strap and four holes, buckle holes, in the strap.

XQ. 169. Well, when you testified yesterday, you were of the impression and wished to be understood that the work piece, No. 48, was the product of the operation of No. 47, wasn't that true?

A. Frankly, I never went into that function of whether it was a piece made on this die or not. I had the type of work and I had the die, and for my purposes of showing the Court how this work was performed and the type of mask which was used with this type of work, I regarded the exhibits as sufficient.

Mr. Kingsland: That is all, Mr. Allen.

Mr. Allen: Is that all?

Mr. Kingsland: I said before.

The Court: (Q.) Mr. Riordon, show me this Plaintiffs' Exhibit—J, is it? A. No, sir. Fifteen.

The Court: (Q.) Exhibit No. 15. Does that operate with a mask similar to—

A. No, Your Honor. This little plate here is the mask [fol. 739] itself. It functions just exactly in the same manner, from a functional standpoint, as any of these large plates, but it is a smaller die, and that small piece of work, you notice the outline there coincides exactly with this piece of work, Exhibit No. 14, whereas in the anvil die with the Freeman mask, Exhibit No. 13, you get the same proposition. Now, if this is being done on what is known as the "Western Model T machine", you will have this die, Exhibit No. 15, coming down, and the first operation is a preliminary cutting of the machine to bring that down in proximity to the work, whereupon the operator can position the work relative to the outside edges of that mask. In other words, the work is masked. Now then, if you were using it in a different type of machine than the Freeman machine, then you would use a die such as this Exhibit No. 13, in which the work would be masked by an internal edge; but from a functional standpoint, they are identical.

Mr. Allen: I would like to offer in evidence the copy of the Altvater patent No. 1,885,169. That is the one he testified about.

Mr. Kingsland: Well, I, of course, at the time objected to it as immaterial, and renew the objection.

The Court: Overrule the objection.
[fol. 740] Mr. Allen: I offer it in evidence as Plaintiffs' Exhibit No. 51.

(The said document was marked by the reporter as Plaintiffs' Exhibit No. 51.)

Plaintiffs' Exhibit No. 51 offered in evidence.

Plaintiffs' Exhibit 51.

**(Letters Patent No. 1,885,169 to A. W. Altvater,
November 1, 1932.)**

880 Nov. 1, 1932.

A. W. ALTVATER

1,885,169

ORNAMENTING DIE

Filed May 22, 1931

4 Sheets—Sheet 1

Fig. 2.

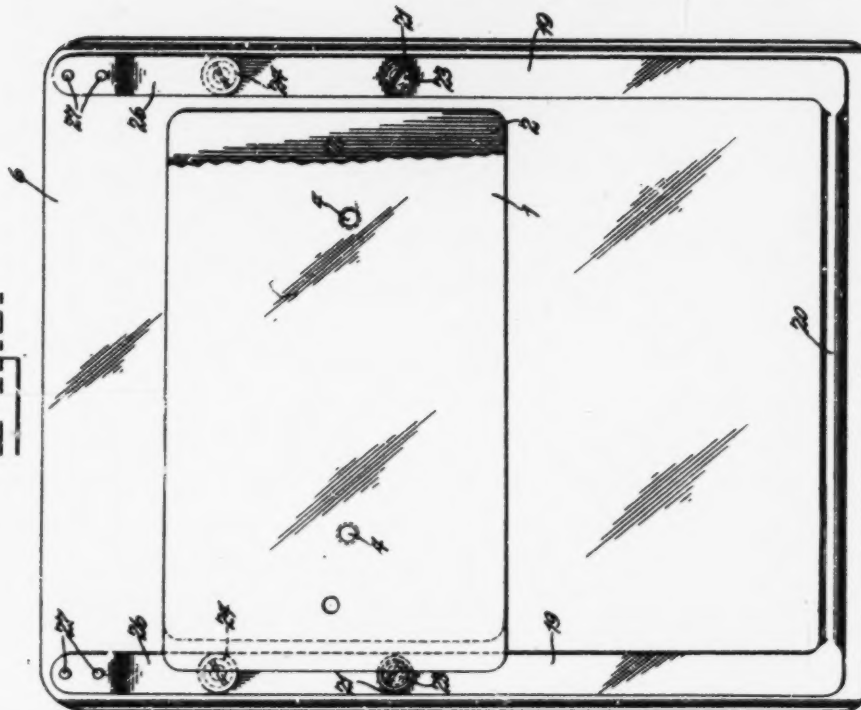
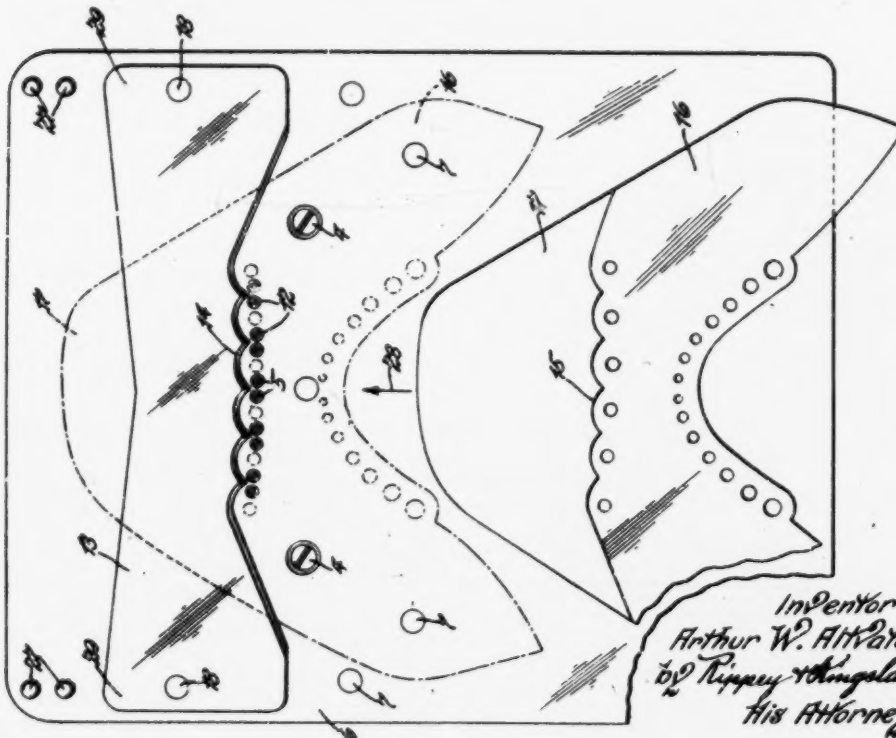


Fig. 1.



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Fig-3.

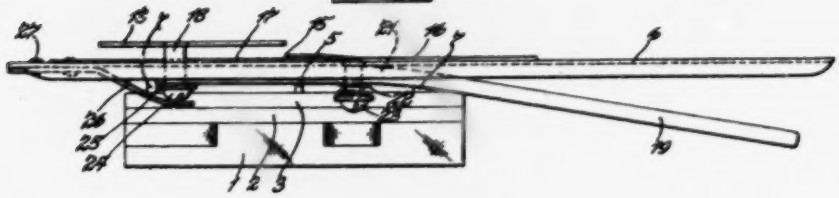


Fig-4.

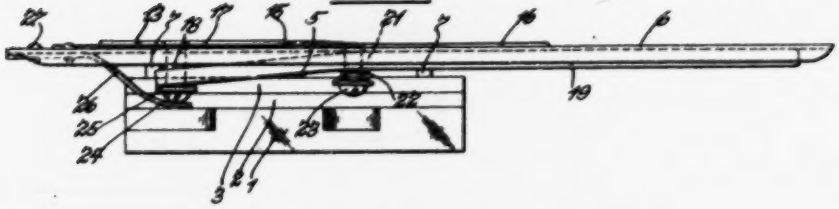


Fig-5.

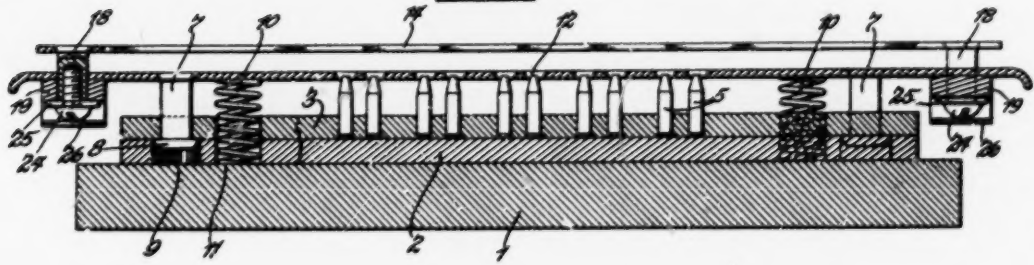
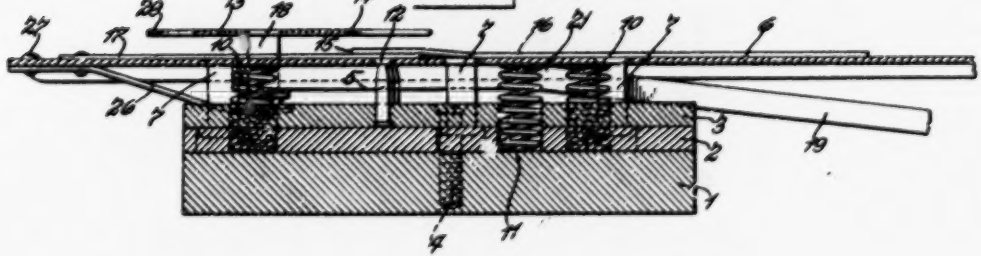


Fig-6.



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884 Nov. 1, 1932.

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1,885,169

ORNAMENTING DIE

Filed May 22, 1931

4 Sheets-Sheet 3

Fig. 6-

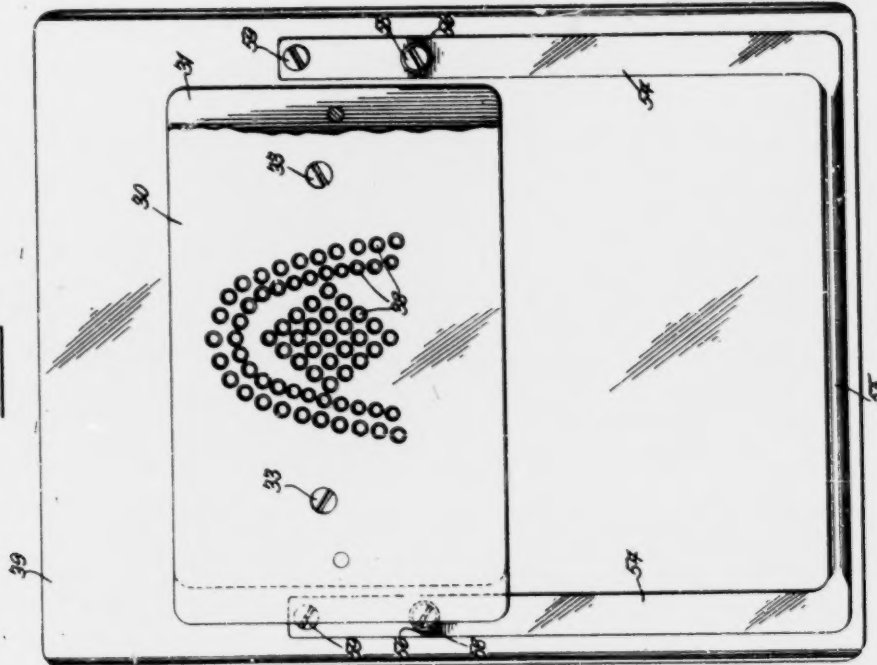
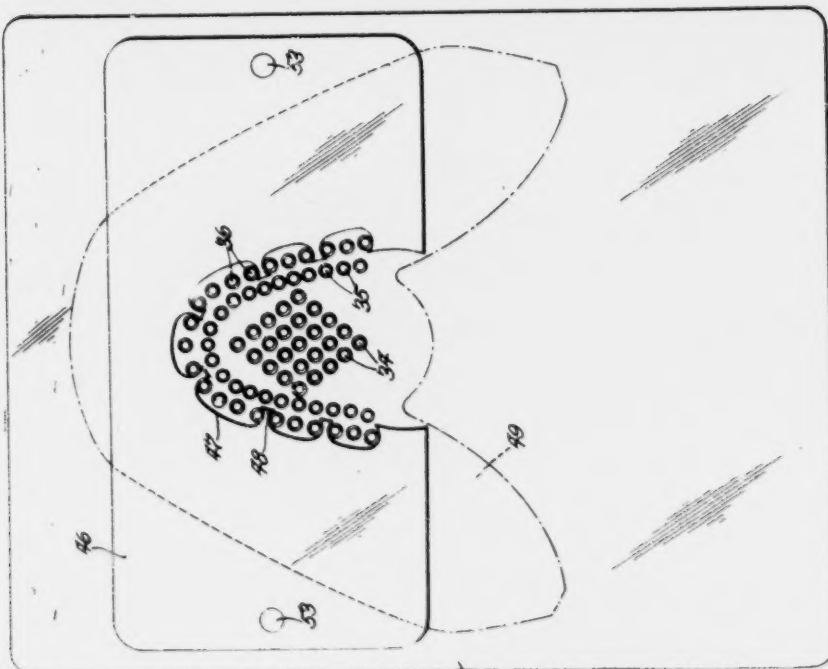


Fig. 7-



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Fig. 9.

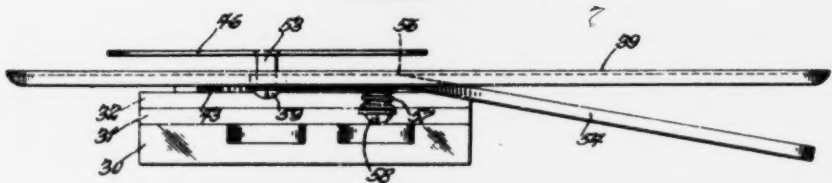


Fig. 10.

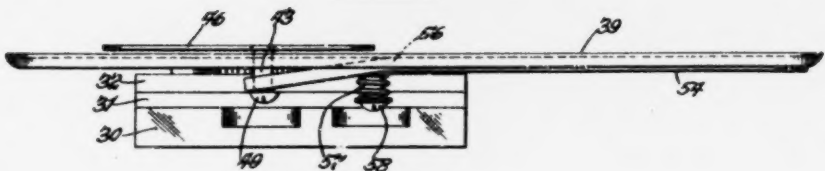


Fig. 11.

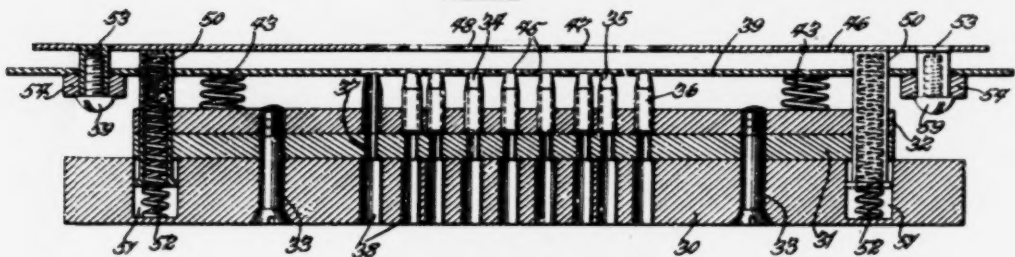
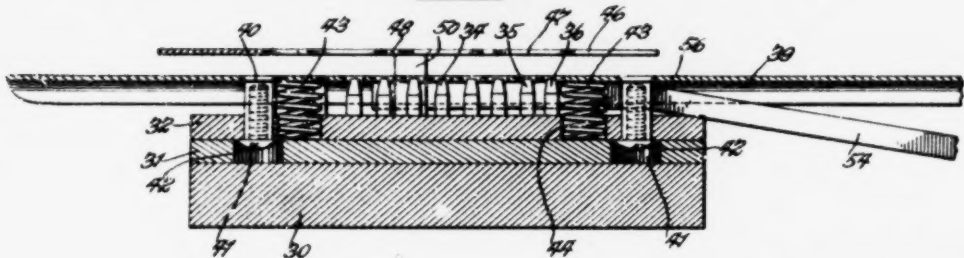


Fig. 12.



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UNITED STATES PATENT OFFICE

ARTHUR W. ALTWATER, OF UNIVERSITY CITY, MISSOURI

ORNAMENTING DIE

Application filed May 22, 1931. Serial No. 539,153.

This invention relates to ornamenting dies for producing ornamental effects on shoe uppers, shoe parts and other materials designed and adapted to be ornamented by dies of this type.

This machine is designed and adapted specially to operate upon shoe uppers and shoe parts, as well as other materials having appropriate shapes for engagement with the gage device of the die, so that said gage device will engage and hold the materials in proper position for operation of the die, and will also function as a gage to facilitate, expedite and assure proper adjustment and location of the materials. For brevity, shoe uppers, shoe parts and other materials are, in many places in this specification, designated as "the work". Accordingly, wherever the designation "work" is used in this specification and in the appended claims, it is intended to include shoe uppers, shoe parts, and all other materials upon which the die may operate.

Objects of the invention are to provide an ornamenting die including a support upon which the work is supported during the operation of the die in position to be acted upon by the die elements so as to cut through the work or produce other ornamental effects thereon, in combination with a gage device adapted to engage and hold the work upon said support during the operation of the die; to form and arrange said gage device so that said gage device will clamp upon and retain the work upon said support and, at the same time, engage an opposing edge of the work to facilitate, expedite and assure the proper adjustment and location of the work for operation of the die; to provide means whereby said gage device may be conveniently operated in order to locate and gage the work preparatory for operation of the die and to clamp the work upon the support to prevent the work from becoming accidentally displaced before the die is operated; and to provide means whereby parts of the die may be removed and replaced and interchanged so as to adapt the die for operation upon work of different shapes, and also to make it possible to mount different ornamenting dies and gages upon the same base member.

Various other objects of the invention will appear from the following description, reference being made to the accompanying drawings, in which—

Fig. 1 is a plan view of one form of die constructed in accordance with the present invention and showing, in solid lines, before proper location on the die, a shoe upper of the construction upon which this die is designed to operate and, in broken lines, a shoe upper located for operation of the die.

Fig. 2 is an inverted plan view of the die showing the actuating device for the gage.

Fig. 3 is a side elevation of the die having a shoe upper thereon in position for operation of the gage to locate the shoe upper accurately and precisely.

Fig. 4 is a side elevation similar to Fig. 3 showing the gage in its operated position.

Fig. 5 is an enlarged vertical transverse sectional view of the die, the gage being shown in front elevation.

Fig. 6 is an enlarged vertical front to rear sectional view of the die and gage.

Fig. 7 is a plan view of a die and gage of different form from the die and gage shown in the preceding views of the drawings.

Fig. 8 is an inverted plan view of the die shown in Fig. 7.

Fig. 9 is a side elevation of the die shown in Figs. 7 and 8, the gage being in its unoperated position.

Fig. 10 is a side elevation similar to Fig. 9, showing the gage in its operated position.

Fig. 11 is an enlarged vertical transverse sectional view of the die and gage of this alternative construction.

Fig. 12 is an enlarged vertical front to rear sectional view of this modified form of die and gage.

The invention as shown in Figs. 1 to 6, inclusive, comprises a base 1 of strong and rigid construction, an auxiliary base element 2 seated on the base 1, and a die supporting base element 3 rigidly seated upon the auxiliary base element 2. In the embodiment of the invention shown, the members 1, 2 and 3 are separate and detachable from each other and are secured together in rigid relationship by screws 4 passing through holes in the

members 2 and 3 and having their lower threaded portions screwed into threaded holes in the base member 1 and having their heads engaging the upper portion of the member 3.

5 A series of die elements 5 are rigidly secured to the member 3 and project upwardly therefrom. The die elements shown are perforating dies and their form may be varied as desired so as to form perforations of any
10 desired size and shape in the work. These die elements are rigid in the member 3 and further rigidity is obtained by the construction shown in Fig. 5, in which the lower ends of said die elements are against the upper
15 surface of the auxiliary base member 2.

The work support comprises a plate 6 attached to the upper ends of pins or screws 7. The pins or screws 7 extend through holes in the die base member 3 and have heads 8 on
20 their lower ends operating in holes 9 in the auxiliary base member 2. Thus the pins or screws 7 are mounted for vertical sliding movements through the member 3 and the heads 8 limit extent of upward movement
25 thereof. A series of springs 10 are mounted in holes 11 through the members 2 and 3 and have their lower ends supported by the base member 1 and their upper ends engaging and supporting the plate 6. These springs 10 are
30 thus held from displacement and yieldingly support the plate 6 in its uppermost position, in which the upper ends of the dies 5 are in alignment with or extend into holes 12 through the plate 6. The springs 10 yield-
35 ingly support the plate 6 in such a position that the ends of the dies 5 are not above the upper surface of the plate 6 because such an arrangement might interfere with the proper movement of the work to and from
40 position on and along the plate 6.

In the specific arrangement and relationship of the dies 5 shown in Figs. 1 to 6, inclusive, said dies are nearly in a straight row, although their arrangement and relationship
45 may be varied as desired without departure from the invention.

The gage device used with the die of Figs. 1 to 6, inclusive, comprises a plate 13 having
50 its front edge that is rearwardly from the dies 5 formed and shaped to provide a gage 14 designed and adapted to be engaged by a similarly shaped edge 15 of the part 16 of a shoe upper, for instance, while the part 17
55 of the shoe upper extends rearwardly below the gage plate 13 and on the plate 6. Thus, the edge 15 of the part 16 of the shoe upper overlaps and is superimposed upon an edge of the part 17 of the shoe upper, so that the edge 15 constitutes an abutment edge or sur-
60 face for engagement against the gage 14.

The ends of the gage plate 14 are attached to the upper ends of stems 18. The stems 18 extend for vertical sliding movements through the lateral marginal portions of the
65 plate 6 (Fig. 5).

An angular bail-shaped lever comprising lever arms 19 and a connection 20 between the front ends of said arms 19 is operatively connected with the stems 18. The angles 21 of
70 the arms 19 pivot and fulcrum against the underside of the lateral marginal portions of the plate 6 and are supported by springs 22 mounted on pins 23 attached to and extending downwardly from the lateral marginal portions
75 of the plate 6. Thus, pivotal supports for the angular arms 19 are obtained, and these pivotal supports include the compressible springs 22. The pins 18 extend through the rear ends of the arms 19. Screws 24 are
80 screwed into threaded holes in the lower ends of the stems 18 and support washers 25 against the lower sides of the arms 19. These washers provide means whereby operation of the arms 19 will depress the gage plate 13.

Leaf springs 26 have their rear ends at-
85 tached to the rear marginal portions of the plate 6 by fasteners 27 and have their forward ends extended downwardly and forwardly under and against the lower ends of the screws 24. The power and energy of
90 these springs 26 are utilized to raise the rear ends of the angular lever arms 19 and also to raise the gage plate 13.

The bail connection 20 between the front ends of the lever arms 19 is below and adjacent
95 to the front end of the plate 6, so that said bail connection may conveniently be engaged and operated.

In the use of this die and gage, the work is placed upon the plate 6, as clearly shown in
100 Fig. 1 of the drawings, and is moved rearwardly on and along said plate 6 in the direction of the arrow 28 so as to extend the part 17 of the work under the gage plate 13. The work is moved to position in which the abut-
105 ment edge 15 is approximately below the gage 14. The operator then engages and raises the bail 20, thus operating the lever arms 19 on their fulcrum angles 21 and moving the gage plate 13 downwardly in opposition to the
110 springs 26.

The construction and arrangement are such that the rear corners 29 of the gage plate 13 are moved into contact with the plate 6 before
115 the intermediate portion of the plate 13, which includes the gage 14, is firmly engaged with the part 17 of the work. This initial downward movement of the gage plate 13 locates the gage 14 close to the gaging edge 15 of the work, so that the operator may easily
120 gage and adjust the work with accuracy and precision for proper operation and use of the die. This is because the gage 14 has a definite predetermined relationship to the dies 5. The corners 29 of the gage plate function as
125 stops to prevent the gage plate from being clamped tight upon the work before the work is properly adjusted while permitting movement of the gage close enough to the work to enable the operator to position the work prop- 130

erly with respect to the gage. After the work has been positioned in this manner, the lever arms 19 are further operated to press the gage 14 upon the work and against the edge 15. When the work has been thus located, it is in exact proper relationship to the dies and is ready for operation of the usual press mechanism.

The embodiment illustrated in Figs. 7 to 9, inclusive, comprises a strong and rigid base 30 having seated thereon an auxiliary base element 31 on which the die supporting base element 32 is secured. These base elements 30, 31 and 32 are separate and detachable and are secured together in rigid relationship by screws 33 extended upwardly through the base members 30 and 31 and having their upper ends screwed into threaded holes in the die supporting base member 32.

Series of die elements 34, 35 and 36 are rigidly secured to the member 32 and project upwardly therefrom. The die elements shown are cutting dies having their upper ends designed and arranged to cut through the work so as to form cut-outs or openings in the work. These dies 34, 35 and 36 may be varied as to form and arrangement. As shown, they are hollow, so that the pieces of material cut from the work pass downwardly through the dies and through holes 37 in the auxiliary base 31 and thence through holes 38 in the base 30. These die elements are rigid with the base member 32 and further rigidity is obtained by the construction shown in Fig. 11, in which the lower ends of said die elements are against the upper surface of the auxiliary base 31.

The work support comprises a plate 39 attached to the upper ends of stems 40 extending through holes in the die base member 32. The stems 40 are tubular and internally threaded. Screws 41 are screwed into the lower ends of the stems 40 and have their heads arranged to engage against the underside of the die base member 32 and operating in holes 42 in the auxiliary base member 31. These screws limit extent of upward movement of the plate 39 and permit downward movement thereof, as required to permit the work to be pressed against the cutting ends of the dies.

A series of springs 43 are mounted in holes 44 in the die base member 32 and have their lower ends seated on the auxiliary base member 31 and their upper ends engaging and supporting the plate 39. These springs are held from displacement and yieldingly support the plate 39 in its uppermost position, in which the upper ends of the dies 34, 35 and 36 are in alinement with or extend into holes 45 through the plate 39. The springs 43 yieldingly support the plate 39 in such position that the ends of the dies 34, 35 and 36 are not above the upper surface of said plate 39 because such an arrangement might inter-

fere with the proper movement and adjustment of the work on and along said plate 39.

In the specific arrangement and relationship shown, the dies 34 constitute a cluster embraced within the loop formed by the arcuate series of dies 35 which, in turn, are embraced within the loop of the arcuate series of dies 36. Obviously, these dies 34, 35 and 36 may be arranged and mounted in different artistic and ornamental arrangements, and it will be understood that the arrangements shown are only illustrative.

The gage device used with this die comprises a plate 46 having in its front edge an opening, notch or space above the series of dies 34, 35 and 36. The work mounted on the plate 39 in proper relationship to the dies and to the gage may be visually observed through this notch, opening or space in the gage plate 46 and arranged in proper relationship to said gage plate in order to obtain the proper position of the work with respect to the dies. The marginal portion of the notch, opening or space in the gage plate 46 has gaging edges 47 and gaging projections 48 with respect to which any outlines, marks or demarcations on or along the work may be made to cooperate in order to aid, facilitate and expedite the proper placement of the work. This will be understood by reference to Fig. 7 of the drawings in which the work 49, shown by broken lines, will be recognized as a part of a shoe upper. The work 49 may have thereon any suitable outlines or markings adapted to be positioned with respect to the gage elements and the projections 47 and 48 so as to guide the operator in the accurate and precise placement of the work for subsequent operation of the dies.

The ends of the gage plate 46 are seated on the upper ends of spring barrels 50 (Fig. 11). These spring barrels 50 have their lower ends mounted for sliding movements in recesses 51 in the base 30. Said spring barrels extend upwardly for sliding movements through holes in the auxiliary base 31, the die base member 32 and the work support 39, and are supported by springs 52 having their lower ends seated on the bottoms of the recesses 51 and their upper ends bearing against the upper end walls of said spring barrels 50. The power and energy of these springs 52 are utilized to support the gage plate 46 yieldingly above and spaced from the plate 39 so as to permit the work to be moved to position along the plate 39 and under the gage plate.

The ends of the gage plate 46 are attached to the upper ends of stems 53, which extend for vertical sliding movements through the lateral marginal portions of the plate 39.

An angular bail-shaped lever comprising lever arms 54 and a bail connection 55 between the front ends of said arms 54 is operatively connected with the stems 53. The

angles 56 of the arms 54 pivot and fulcrum against the underside of the lateral marginal portions of the plate 46 and are supported by springs 57 mounted on pins 58 attached to and extending downwardly from the lateral marginal portions of the support 39. Thus, pivotal supports for the angular arms 54 are obtained, and these supports include the compressible springs 57. The pins 53 extend to the rear ends of the lever arms 54 and are retained in operative engagement therewith by screws 59 that are screwed into threaded holes in the lower ends of said stems.

In the use of this die and gage, the work is placed upon the plate 39 and is moved rearwardly on and along said plate to position above the series of dies 34, 35 and 36 and under the gage plate 46. The operator then engages and raises the bail 55, thus operating the lever arms 54 on their fulcrum angles 56 and moving the gage plate 46 downwardly in opposition to the springs 52.

The initial downward movement of the gage plate 46 locates the gage edges 47 and projections 48 close to the work, so that the operator may easily gage and adjust the work with accuracy and precision in operation and use of the die. The operator may be guided in gaging and adjusting the work by any outlines or marks or imprints on the work prearranged thereon in order to cooperate with these gage edges and projections 47 and 48. After the work has been positioned in this manner, the lever arms 54 are further operated to press the gage plate 46 upon the work preparatory for operation of the usual press mechanism.

From the foregoing, the construction, arrangement and operation of my invention and the different embodiments thereof will be clearly understood. The different gage devices and die members may be detached and others substituted in order to adapt the invention to various uses.

The invention may be varied otherwise than as specifically described without departure from the nature and principle of the invention. I do not restrict myself in any unessential respects, but what I claim and desire to secure by Letters Patent is:

1. A machine of the character described comprising rigid ornamenting dies, a movable support having holes therethrough for the projection of said dies when said support is moved, a gage device supported by said support for gaging and locating the work properly with respect to said dies, and means for operating said gage device to position against the upper side of the work that is mounted on said support.

2. An ornamenting die comprising a rigid base device, a die member rigidly attached to and projecting upwardly from said base device, a support for the work having a hole therethrough for the projection of said die

element when said support is moved toward said base device, springs supporting said support at a distance from said base device whereby the work on said support is freely movable across said hole to position for operation of the die, a gage device, means carried by said support for supporting said gage device above said support to permit a part of the work to be passed between said gage device and said support, and means carried by said support for moving said gage device toward said support and into engagement with the work on said support.

3. An ornamenting die comprising a rigid die element, a work support having a hole therethrough for the projection of said die element, means supporting said support in position in which the upper surface thereof is beyond the end of said die element, a gage device, springs supporting said gage device spaced from said support a distance sufficient to permit the work to be inserted between said gage device and said support, and a lever element for moving said gage device to gaging position with respect to the work.

4. A die of the character described comprising a rigid ornamenting die, a movable work support having a hole therethrough for the projection of said die when said support is moved, a gage device mounted above said support for gaging and locating the work properly with respect to said die, means for supporting said gage device spaced above said support a distance to permit the work to be placed between said gage device and said support, and lever means for moving said gage device to gaging position with respect to the work.

5. A device of the character described comprising a rigid support, a rigid die projecting from said support, a movable work support having a hole therethrough for the projection of said die when said work support is moved toward said first support, a gage device located above said work support for gaging and locating the work properly with respect to said die, means for supporting said gage device spaced from said work support a distance to permit the work to be extended between said gage device and said work support, a lever, and means operatively connecting said lever with said gage device whereby said lever will move said gage device to gaging position with respect to the work after the work has been placed between said gage device and said work support.

6. A device of the character described comprising rigid ornamenting dies, a movable support having holes therethrough for the projection of said dies, a gage device having a gaging edge adapted to engage a projecting portion of the work that is extended between said gage device and said work support, means for supporting said gage device spaced from said work support to permit the work

to be extended between said gage device and said work support, and means for operating said gage device to gaging position for engagement of said gaging edge with said projecting portion of the work when the work is extended between said gage device and said support.

7. An ornamenting die comprising a rigid die member, a work support having a hole therethrough adapted to receive said die member when said support is moved toward said die member, a gage device for gaging the work on said support in proper position with respect to said die member, means for guiding said gage device, and a lever for moving said gage device toward said work support to gaging position with respect to the work on said support.

8. An ornamenting die comprising a base member, a die rigid with and projecting from said base member, a work supporting member having a hole therethrough for the projection of said die, a gage device, means supported by one of said members for supporting said gage device spaced above said supporting member a distance sufficient to permit the work to be passed between said gage device and said work supporting member, and a lever for moving said gage device toward said work supporting member to gaging position with respect to said work.

9. A die of the character described comprising a base, a die projecting rigidly from said base, a work support having a hole therethrough for the projection of said die, means mounted on said base supporting said support for movement toward and from said base, a gage, guides engaging said work support and controlling movement toward and from said work support, a spring supported by said work support for supporting said gage spaced from said work support, and a lever for moving said gage to gaging position with respect to the work on said support.

10. A device of the character described comprising a base, an ornamenting die projecting rigidly from said base, a work support having a hole therethrough for the projection of said die, springs supporting said work support above said base, guides for guiding said work support in its movements toward and from said base, a gage device, means in connection with said work support for supporting said gage device spaced from said work support a distance to permit the work to be passed between said gage device and said work support, and a lever co-operating with said work support for moving said gage device toward said support.

11. A die of the character described comprising a base, a die projecting rigidly from said base, a work support having a hole therethrough for the projection of said die when said die is moved toward said base, springs

for supporting said support spaced from said base and for moving said support from said base, guides engaging said base and guiding said support in its movements toward and from said base, a gage above said support, guides in connection with said support for guiding said gage in the movements of said gage toward and from said support, means for moving said gage to gaging position toward said support, and springs for moving said gage from said support.

12. An ornamenting die comprising a rigid die element, a movable support for the work having a hole therethrough for the projection of said die element, a gage device having a gaging edge for abutting against a projecting portion of the work located on said support, means for supporting said gage spaced from said support, and a lever for operating said gage to gaging position toward said support.

13. A device of the character described comprising ornamenting die elements, means rigidly supporting said die elements, a work support movable toward and away from said supporting means and having holes therethrough for the projection of said die elements, springs for supporting said work support and moving said work support from said supporting means, a gage member, gaging means in connection with said gage member for gaging the work on said support, springs supporting said gaging member spaced above said work support, guides engaging said gaging member and said work support for guiding said gaging member in its movements toward and from said work support, and a lever engaging said guides for moving said gage device toward said work support.

14. A device of the character described comprising a rigid die, a work support for supporting the work for movement toward and from said die and having a hole therethrough for the projection of said die, a gage device, means for supporting said gage device spaced above said support a distance to permit the work to be extended between said gage device and said support, gaging means on said gage device for gaging the work on said support, guides for guiding said gage device in its movements toward and from said support, and a lever for moving said gage device toward said support.

15. In a device of the character described, a movable work support, a die for cutting the work when said support is moved in one direction, a gage device, springs supporting said gage device for movement toward and from said work support, guides engaging said gage device and said work support and guiding said gage device in said movements, and levers engaging said guides and fulcruming against said support for moving said gage device toward said support.

16. A device of the character described comprising ornamenting dies, a work support for supporting the work in position to be acted on by said dies when said work support is moved in one direction, means movably supporting said work support, a gage device, means movably supporting said gage device spaced from said work support, guides cooperating with said gage device and said work support to guide said gage device in said movements, levers fulcruming against the underside of said work support and engaging said guides for moving said guides and thereby moving said work support to gaging position, and a connection between said levers located below said work support.

17. A device of the character described comprising a series of rigid ornamenting dies, a work support having holes therethrough for the projection of said dies through said work support and into effective engagement with the work on said support, a gage, springs for supporting the gage spaced above said support, guides for guiding the gage in its movements toward and from said work support, and levers engaging said guides and fulcruming against said work support for moving said gage toward said work support.

18. A device of the character described comprising a series of rigid ornamenting dies, a work support having holes therethrough for the projection of said dies through said work support and into effective engagement with the work on said support, a gage, springs for supporting the gage spaced above said support, guides for guiding the gage in its movements toward and from said work support, levers engaging said guides and fulcruming against said work support for moving said gage toward said work support, and means for operating said levers simultaneously.

19. A rigid ornamenting die, a plate for supporting the work spread thereon and having a hole through which said die may project to cut the work, a gage supported above said plate, and levers for moving said gage approximately perpendicularly toward said plate to gaging position adjacent to the work spread on said plate.

20. A rigid ornamenting die, a plate for supporting the work spread thereon and having a hole through which said die may project to cut the work, a gage supported above said plate, levers for moving said gage to gaging position adjacent to the work spread on said plate, and springs for moving said gage away from the work.

21. A rigid ornamenting die, a plate for supporting the work spread thereon and having a hole through which said die may project to engage the work, a gage supported above said plate, and a lever device pivotally

supported below said plate for moving said gage approximately perpendicular toward said plate to gaging position adjacent to the work spread on said plate.

22. A rigid ornamenting die, a plate for supporting the work spread thereon and having a hole through which said die may project to ornament the work, a gage above said plate, guides in connection with said gage extending through said plate, and levers pivotally supported below said plate and engaging said guides for moving said gage to gaging position adjacent to the work spread on said plate.

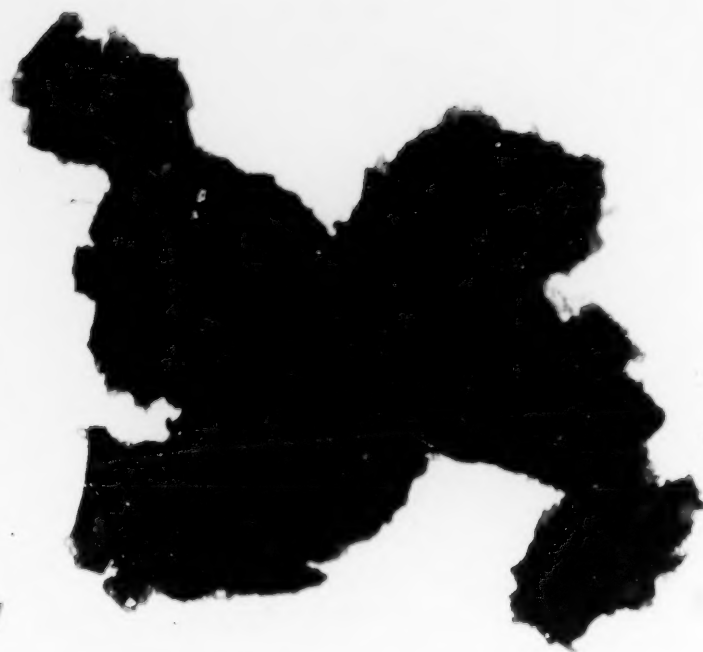
23. A rigid ornamenting die, a plate for supporting the work spread thereon and having a hole through which said die may project to ornament the work, a gage above said plate, stems for supporting and operating said gage, springs engaging said stems for supporting said gage spaced above said plate, and levers pivotally supported at the under side of said plate and engaging said stems for moving said gage to gaging position adjacent to the work spread on said plate.

24. A rigid ornamenting die, a plate for supporting the work spread thereon and having a hole through which said die may project to ornament the work, a gage above said plate, stems attached to said gage and projecting downwardly below said plate, springs for supporting said gage spaced above said plate, levers engaging said stems for moving said gage toward said plate in opposition to said springs, and elastic devices supporting said levers.

25. A rigid ornamenting die, a plate for supporting the work spread thereon and having a hole through which said die may project to engage the work, a gage supported above said plate, elements in connection with said gage extending downwardly below said plate, and a lever device pivotally connected with said elements and cooperating therewith to move said gage downwardly and cooperating with said plate to limit extent of movement of said gage from said plate.

26. A rigid ornamenting die, a plate for supporting the work spread thereon and having a hole through which said die may project to engage the work, a gage above said plate, springs supporting said plate and said gage respectively for movements relative to each other and relative to said die, and a lever device connected with said gage for moving said gage toward said plate to position to gage the work spread on said plate.

27. An ornamenting die comprising a rigid base, a die element rigid with and extending from said base, a plate for supporting the work spread thereon and having a hole through which said die may project to engage the work, springs supported by said base and supporting said plate, a gage above



said plate, springs supported by said base and supporting said gage spaced from said plate, and a lever connected with said gage and operated to move said gage toward said plate to gaging position.

28. An ornamenting die comprising a rigid base, a die projecting from said base, a gage, springs supported by said base and yieldingly supporting said gage, guides in connection with said gage and said base guiding said gage in its movements toward and away from said base, a plate for supporting the work spread thereon between said gage and said die and having a hole through which said die may project to engage the work, springs supporting said plate, and a lever device for moving said gage toward said plate to gaging position adjacent to the work spread on said plate.

29. An ornamenting die comprising a rigid base, a die projecting rigidly from said base, a plate for supporting the work spread thereon and having a hole through which the die may project to engage the work, a gage above said plate, springs supporting said plate and said gage respectively for movements relative to each other and relative to said die, and a guide guiding said gage and said plate in their movements and preventing relative displacement thereof.

30. An ornamenting die comprising a rigid base, a die projecting rigidly from said base, a plate for supporting the work spread thereon and having a hole through which the die may project to engage the work, a gage above said plate, springs supporting said plate and said gage respectively for movements relative to each other and relative to said die, guides engaging both said plate and said gage and preventing relative displacement thereof, and a lever device for moving said gage to gaging position adjacent to the work spread on said plate.

31. A rigid ornamenting die, spaced work supporting and gaging plates above said die, springs supporting one of said plates spaced above the other, and means for operating and guiding said one of said plates relative to the other.

32. A rigid ornamenting die, spaced work supporting and gaging plates above said die, and a lever device pivotally supported otherwise than by the plate movable thereby for moving one of said plates approximately perpendicularly toward the other.

ARTHUR W. ALTVATER.

[fol. 752] (Recess, ten minutes.)

CHESTERTON S. KNIGHT,

a witness of lawful age, being duly produced, sworn and examined, testified on behalf of the plaintiffs, in rebuttal, as follows:

Direct Examination.

By Mr. Allen:

Q. 1. Please give your full name and address.

A. Chesterton S. Knight, Brockton, Massachusetts.

Q. 2. With what company are you connected?

A. George Knight & Company.

Q. 3. That is the George Knight Company, who is the successor to that company whose books, effects of whose books were referred to by the defendant in this case?

A. Those are our books.

Q. 4. Are you familiar with dies, not the particular ones here shown, but dies of the character of dies, Exhibits F, G and H in this case? A. I am.

[fol. 753] Q. 5. I asked you to make up a fresh die as an example of this kind of die that you have just referred to, and do you have the dies with you, Mr. Knight?

A. I have them right here.

Q. 6. Now, what is the name for dies like these that you have just produced, what are they called?

A. Imitation tip dies with sheath gauges.

Q. 7. All right. Now, the two dies which you have produced are not the same. One has a sliding element and the other has a fixed element; is that correct?

A. Yes, that is correct.

Q. 8. Now, what nomenclature is applied to each imitation tip gauge?

A. One is a fixed sheath gauge and the other is a sliding sheath gauge.

Mr. Allen: I offer the two dies that the witness has just referred to in evidence as Plaintiffs' Exhibit No. 52, being the sliding, and 53 being the fixed.

Mr. Kingsland: If the Court please, I do not see the materiality of it. These gauges were made apparently recently. We have already got examples in here in Defendants' Exhibits F, G and H.

The Court: Overrule the objection.

Mr. Allen: I will develop the pertinency, Your Honor. [fol. 754] I just thought I would rather have them marked.

(The said dies were marked by the reporter as Plaintiffs' Exhibits Nos. 52 and 53, respectively.)

Plaintiffs' Exhibits Nos. 52 and 53 Offered in Evidence. (Physical Exhibits.)

Q. 9. Now, looking at the uppermost plate in Exhibit No. 52, I notice six small round places. What do you call those?

A. Those are indentations [of] dimples for the purpose of more securely holding the work than would be the case if they were not there, and they are placed at the point where the sheath gauge holds the work the strongest in its clamping action.

Q. 10. That is along the rear line here (indicating)?

A. Mostly along the rear line.

Q. 11. Will you demonstrate how you would hold the work? That is, the way the die is supposed to be operated, hold it like that.

A. (Demonstrating) I am holding the work as I am depressing the sheath gauge in such a way that my fingers are approximately over the dimples or depressions—the work holding dimples or depressions.

Mr. Allen: Now, the witness used in that connection Defendants' Exhibit F-1 in illustrating.

Q. 12. Now, you actually performed a, what you would call a gripping or clamping just now in your demonstration? A. I did.

Q. 13. Now, is there any slit along the sides of the stripper plate in Exhibit No. 52? A. There is none.

Q. 14. Yet you were able to effect a clamping by pressing down on that plate, is that correct?

A. That is correct. The plate is a very thin piece of spring steel.

Q. 15. State whether or not that is the normal way that those sheath gauges are made.

A. That is made in exactly the normal way that they were made.

Q. 16. By your company?

A. By our company, by the same die maker who made them.

Q. 17. In the old days? A. In the old days.

Q. 18. I notice that there are some spacers between the uppermost plate and the sliding plate in Plaintiffs' Exhibit No. 52. What are those spacers for?

A. Those spacers are to position the sheath gauge above the work support sufficiently for the work to be inserted between these two plates.

Q. 19. Well, supposing a thicker piece of work were to be required in one die than in another die, state wherein you would make the change to accommodate the thicker piece of work.

[fol. 756] A. The change would be made in this construction by a thicker spacer.

Q. 20. You would not bend up the sides of the slide, would you, in order to accomplish that? A. No.

Q. 21. Now, referring to Exhibit No. 53, will you please put the piece of work, Exhibit F-1, in there and illustrate how you would operate with the device?

A. (Demonstrating) I am now holding my fingers approximately over the indentations or dimples, so that the work will be clamped by these indentations.

Q. 22. Now, Mr. Knight, I notice that there are spacers at the sides between the forward edges of the upper plate in Exhibit No. 52 and the portions of the stripper plate on which they are mounted. What are those spacers there for?

A. Those spacers are there to position the sheath gauge sufficiently far above the work support plate so that the work for which the die was made may be readily inserted and removed.

Q. 23. Now, I notice that those spacers which secure this sheath gauge, as you call it, onto the plate beneath are secured to slit portions at the sides: in other words, that the stripper plate or work supporting plate beneath the gauge has its lateral margin slit, and the sheath gauge is [fol. 757] mounted on the forward end of these slit portions. Explain to us why those slits are there.

A. There is a very small, relatively small clearance between the stripper plate or work support plate of the die and the tube holding plate of the die. This clearance is not sufficient to permit repeated operation of the die with-

out badly deforming the stripper plate or work support plate, if this plate was not provided with the slits. These slits permit the portion of the work support plate to which the spacing shims are riveted to depress under the action of the plunger of the perforating press without seriously deforming the work support plate. And I might add that in clamping a piece of work in this die, the portions of the work support plate to which the spacers are riveted is not materially displaced in this clamping action; in fact, it is not perceptibly displaced, to the naked eye.

Q. 24. Am I correct that what the last part of your answer means is that the slits in the sides of the stripper plate do not contribute materially to any clamping possibilities in connection with the sheath in this die, Exhibit No. 53? A. That is correct.

(A die was marked by the reporter as Plaintiffs' Exhibit No. 53.)

[fol. 758] Q. 25. The die, Exhibit No. 52, without any slits along the margin of the stripper, is similar to the die, Defendants' Exhibit G, in that respect, is it not?

A. That is correct.

Q. 26. With respect to Defendants' Exhibit F, what would you say, Mr. Knight, is the cause of the line, indented line, and line of spring in this plate at the sheath, as you call it, that appears in that Exhibit F, what would cause that?

A. I have seen a number of these dies, after considerable use, and they are very apt to show such a line, which is caused by the front edge of the plunger plate of the perforating press striking repeatedly against the face of the sheath gauge, and this line indicates the position at which the die was repeatedly [use] in the press, and, therefore, clearly denotes that the fingers of the operator in clamping the work with this sheath gauge must have been far enough forward of this line so that there would be safety in the operation of the die and the operator would not run the chance of having the fingers crushed by the striking plate of the perforating press.

Q. 27. Mr. Knight, refer a moment to Plaintiffs' Exhibit No. 53. Can you recall, in your experience, any instance in which your company, in order to provide for spacing

of the sheath gauge over the stripper, bent up these side [fol. 759] strips, deliberately bent them up?

A. Not to bend them up above their normal position, which is level with the unslit portion of the stripper plate.

Q. 28. In other words, no bendability, as a permanent state, was given, in your company, to these side strips, in order to cause the die to function? A. That is correct.

Mr. Allen: That is all.

Cross Examination.

By Mr. Kingsland:

XQ. 1. Mr. Knight? A. Yes, sir.

XQ. 2. When did you go with the George Knight Company? A. In 1916.

XQ. 3. Now, as I understand, all of the dies of both the defendants' Exhibits F to G, inclusive, and the ones that you have produced do have a clamping function, do they not? A. That is correct.

XQ. 4. And it was intended, in the operation of the machine, when those dies were in cutting position, there would be a place for the operator's hands, so as to maintain that clamping position when the work was presented to the cutting tube? A. That is right.

XQ. 5. Now, I believe I am to understand that all of the [fol. 760] dies, that is, all of the types of the dies did have the slits on the sides so that there would be that relative movement due to the slitting at the side, isn't that true, that is, all of these sheath dies?

A. No, sir. I have shown you some here that had no slits.

XQ. 6. Well, at times they were made with slits?

A. Not those types.

XQ. 7. Let me see if I understand what you mean. Let us take Defendants' Exhibit F, you recognize that to properly identify structure made by the George Knight Company, do you not?

A. This die has been repaired and replacements made, and it has been patched up and is distorted out of shape, so that it is not in the condition in which we manufacture these dies.

XQ. 8. Well, so far as the structure is concerned, it is the same, with the slits, with the plate, and with the functioning as a gauge and as a clamp?

A. It has most of the elements, in modified form, however, of the sheath gauge dies as we made them.

XQ. 9. Well, now, where is the modification that occurred in this die, Defendants' Exhibit F?

A. The sheath gauge plate is bent out of shape and patched, and the spacing elements between the sheath [fol. 761] gauge and the plates on which it is mounted apparently are different from the original manufacture.

XQ. 10. Well, does it differ in its operation from the original manufactured die, that is, so far as the gauging and clamping function is concerned?

A. Not materially, excepting that it is harder—there is not as comfortable space to slide the work in as when it was originally made.

XQ. 11. But so far as the gauging and clamping function is concerned, it is just the same as those that you have produced? A. Substantially.

XQ. 12. And it is the die that we discussed when I was in your office some two or three years ago, is it not?

A. I don't recall as to that.

XQ. 13. You don't remember that visit, do you?

A. I remember a visit, but not of yours, Mr. Kingsland.

XQ. 14. What is your age, Mr. Knight? A. Forty.

Mr. Kingsland: That is all.

Redirect Examination.

By Mr. Allen:

RDQ. 1. When you first came with the company, Mr. Knight, how old were you? A. Sixteen.

Mr. Allen: That is all.

[fol. 762] The Court: That is all.

Mr. Allen: Just a moment, Mr. Knight. That is all.

Mr. Allen: That concludes our rebuttal, if the Court please.

[fol. 763]

CHARLES W. McDERMOTT,

a witness of lawful age, having been heretofore duly produced, sworn and examined, upon being recalled to the witness stand, testified on behalf of the defendants, on their counterclaim, as follows:

Direct Examination.

By Mr. Rogers:

Q. 1. Now, Mr. McDermott, you testified previously in this case, I believe.

Mr. Allen: That is agreed.

Mr. Sutherland: You know it, don't you?

Mr. Allen: Not once, but many times.

[fol. 764] Q. 2. I ask that you consider Reissue 20,203.

A. Yes.

Q. 3. And taking the claims that appear in that reissue, identify them as you go along as to whether or not they appeared in the original Freeman Patent.

Mr. Allen: Your Honor's ruling that matters as to this validity, my objection would stand of record, goes for the counterclaim, too, is that correct?

The Court: Yes, sir; it may be so understood.

Q. 4. And I should like you to state what, if any, mechanical differences there are between these claims, as you go along, and claims that were considered by the First Circuit.

A. I am sorry. I lost the first part of your question in going to get this book (indicating).

Q. 5. The first thing I wanted you to do in connection with each claim is to say whether it appeared in the original patent, and if so, under what number, just as you go along.

A. All right. I had these arranged. Somebody has taken my stuff. I have considered all the claims in the Freeman Reissue Patent 20,203, particularly in connection with the decision of the Court of Appeals for the First Circuit. In this opinion the Court divided the claims of the original Freeman Patent into three groups, namely,

[fol. 765] those involving the anvil die, so-called, those involving a mask, and, three, those involving the slide for moving the die in and out of the press. In my present discussion, I am restricting myself to groups 1 and 3, namely, those involving the anvil die and those involving the slide for moving the die in and out of the press. For convenience, I am grouping claims 1, 2, 3 and 4 of Reissue Patent 20,203, which claims appeared in the Freeman original patent as claims 2, 3, 4 and 5, respectively.

Claim 1 of the Freeman Reissue Patent 20,203 defines:

“A machine of the kind described, having pressure applying means, ornamenting means mounted independent of said pressure applying means and co-operating therewith, means for supporting the ornamenting means, said ornamenting means and said supporting means constructed and arranged to support in a substantially flat position a portion of a shoe upper made up of two or more pieces of flat material attached together such that the combined pieces forming the shoe upper cannot be placed in a flat position, and to allow other portions of the upper to extend about its sides without buckling the portion of the upper to be ornamented.”

[fol. 766] In its decision, the Court of Appeals for the First Circuit pointed out that the elements, pressure applying means, ornamenting means mounted independently of said pressure applying means and co-operating therewith, means for supporting the ornamenting means, all were disclosed in the patent to Newton.

Q. 5. No. 1,439,019?

A. Yes. No. 1,439,019, December 22, 1922, the application for this patent having been filed September 23, 1920. In effect, the Circuit Court of Appeals pointed out that it was the combination of a small die on a columnar support constituted what is claimed to be the basic invention of the Freeman Patent.

And the Court of Appeals for the First Circuit stated that a die which is held on a central support around which an upper may be draped is fully and completely anticipated by the patent to Wright, No. 521,068, June 5, 1894. In

effect, the decision of the Court of Appeals for the First Circuit held that it did not involve invention to substitute a small die on a columnar support for the work support disclosed in the patent to Newton.

Q. 7. You were speaking, I should think, in particular of the last paragraph in column 1 of 84 Federal (2d) 426.

Mr. Allen: Oh, now, just a minute. My gracious! It is [fol. 767] bad enough for the witness to construe the decision of the Court, but now to have counsel read him the passage out of the decision.

Mr. Rogers: I am not reading him the passage out of the decision. I am just saying that is what he was referring to.

Mr. Sutherland: The question is leading.

Mr. Rogers: He doesn't even have to answer it.

Q. 8. Proceed, Mr. McDermott. I would like to ask you this question: Referring to sheet 2 of the Newton Patent No. 1,439,019, do you see—will you identify what is the presser member? A. It is marked "8", right of Figure 5.

Q. 9. And what is the work in that case? Well, I think the work is resting on a stripper plate, that is, it is plain from the patent. The question I want to get to is this: Is there relative movement or not between the presser member 8 and the work?

A. When the presser 8 comes down upon the work, the work is in a position of pressure directly beneath the presser member 8. After the vamp is perforated, the work support upon which the work rests is drawn towards the operator, operative into a position of clearance into which the perforated work is assembled from the work support [fol. 768] and a fresh piece is re-located on the work support, whereupon the work support is again moved into the position of pressure beneath the pressure applying member 8.

Q. 10. The ornamenting means, by that explanation, appears, or does it not appear to you to be independent of the pressure applying means? A. Yes, it is independent.

Q. 11. Will you continue with your explanation then?

A. Claims 1, 2, 3 and 4 find response in a machine of the Newton type provided with a small die and small columnar work support which the Court of Appeals found

to exist in the patent to Wright, and in my opinion the same reasoning that the Court of Appeals applied to claim 6 of the original patent which they found invalid applies to these four claims—1, 2, 3 and 4 of the Reissue Patent 20,203.

Q. 12. Well, now, considering one of those claims, such as claim 2 and claim 6, which was disclaimed, what mechanical elements appear in claim 2, if any, that don't appear in claim 6?

A. Are you talking now about the original patent?

Q. 13. I am. I am sorry. Yes.

A. Apparently the only element recited in original claim 2, now claim 1 of Reissue 20,203 is the pressure applying means.

Q. 14. You may continue with your answer to the main question. A. Claim 5 is a claim—

[fol. 769] Q. 15. (Interrupting) Of the reissue or the original?

A. Claim 5 of the Reissue 20,203 is a claim forming a part of the third group of claims referred to by the Circuit Court of Appeals, namely, those involving the slide for moving the die in and out of the press. Claim 5 reads:

“The combination for use in a machine for cutting designs in shoe upper material having clutch locking mechanism, comprising a cutting die, a movable support for the die, and a clamping mask to hold the upper material under tension, and means for releasing the clutch locking mechanism by the movement of the support.”

Thus claim 5 is directed to a construction having a work support which is movable from a position of clearance to a position of pressure. The machine is provided with a clutch for clutching the driving mechanism to the pressure applying means, and this mechanism is provided with a clutch lock. As the work support comes into the position of pressure on its movement from the position of clearance, the clutch lock means mechanism is unlocked, in order to free the clutch so it can be thrown into operation by the movement of a treadle.

A structure similar to that recited in claim 5 is disclosed [fol. 770] in the patent to Schwalbach, which, however, does not show a work support movable from a position of

clearance to a position of pressure. It is, however, provided with a movable work support, in that a multi-faced work support rotates about a horizontal axis. The pressure applying mechanism also in the patent to Schwalbach is mounted to rotate above a horizontal axis and mechanism is provided to prevent the clutch from being thrown into operation until the plane faces on the multi-faced work support and pressure applying mechanism are brought into an adjacent position in horizontal plane—horizontal parallel planes.

Q. 16. Will you tell me—

A. (Interrupting) Pardon me. I have not completed my answer yet.

The patent to Leavitt, No. 620,659, March 7, 1899, discloses that a work support movable from a position of clearance to a position of pressure and provided with a device for unlocking the clutch locking mechanism at the moment the work support is located under the pressure applying means, is an old construction.

Q. 17. I should like to ask you one question about shoe machinery containing one-revolution clutches, if you know of any patents wherein one-revolution clutches are shown in shoe machinery?

[fol. 771] A. In all machines of the type disclosed in the Freeman Patent and exemplified by the Knight tip press standing here (indicating) in this court room, are all provided with one-revolution clutches, in order that the perforation may be made by a single stroke of the pressure applying machines and then stopped. In the Knight tip press, after the treadle is operated, the operator must release the treadle with his foot, in order that the clutch will be thrown out after one complete revolution. In many of the perforating machines of the prior art, mechanism is provided for automatically throwing out the clutch after one revolution, whether or not the operative maintains his or her foot upon the treadle.

The Court: I suppose we better stop at this point.

At this point, 12:33 P. M., a recess was had until 2:00 P. M.

After recess, at 2:00 P. M., on Friday, February 9, 1940, the following proceedings were had:

The Court: You may proceed, gentlemen.

Direct Examination Resumed.

By Mr. Rogers:

Q. 18. Mr. McDermott, what do you need to start, or do [fol. 772] you remember where you left off?

A. Referring to claim 6 of Reissue Patent No. 20,203, defines the construction, including a movable support for the die, and it is included by me in the group of claims involving the slide for moving the die in and out of the press. It differs from—claim 6 differs from claim 5 in that it recites as an element a clamping mask to hold the upper material under tension. In my opinion—pardon me—before reciting a patent against claim 6, I wish to call attention to the second to last paragraph of the decree of the Circuit Court of Appeals of the First Circuit, on page 430, of 84 F. R. second series, in which the Court held all claims invalid, namely, 62, 65 to 69, and 94, of the original Freeman Patent. The Court of Appeals said that the references—pardon me—the Court of Appeals said, in referring to patents to Newton, Whitcomb, and the Mc-Genness & Tweedie Patent:

“It is not necessary to multiply references.”

The patent to Furber—

Q. 19. No. 1,475,181?

A. December 27, 1923, discloses each and every element recited in claim 6 of Freeman Reissue Patent No. 20,203.

Q. 20. Excuse me, Mr. McDermott. Is it your position [fol. 773] that Furber has the clamping mask also?

A. Yes. The Court of Appeals of the First Circuit, in referring to the patent to Furber, stated, page 430:

“In the Furber Patent dated 1923 (application filed 1920) a clamp was used to hold down leather which was to be cut. A clamp appears, although not very clearly, as though it had a window in it, but if so, the window was not used for gauging purposes.”

The patent to Furber discloses a turret disclosed particularly in the Figure 3, sheet 3, in order that the work

may be located between clamps in the position shown at the bottom of Figure 3, and then moved to the left into position for operation with the perforating dies.

Q. 21. Will you tell us, please, where the gauge is in the Furber device?

A. Referring to Figure 3, at the right is shown in dotted lines in plan and full lines, both of which are marked 88, the clamps, one of which engages one face of a piece of work and the other clamp engaging the face of still another piece of work, both pieces of work being superimposed, or one piece of work being superimposed upon the other. The clutch locking mechanism defined in claim 6 of Freeman No. 20,203 is illustrated in Figure 1 and is shown marked [fol. 774] 38. The cutting dies are disclosed at 24, Figure 1, directly in the center of the figure. When the work support is moved—pardon me—cancel that. When two of the pieces of work held between the clamps 88 is moved towards the position of operation, a row 160, Figure 1, is engaged by the work support at the moment it moves into the operating position that rocks bell crank lever 162, so as to withdraw the end of the lever 166 from the clutch dog 38, thus unlocking the clutch.

In order to save time in my testimony, I consider that claims 7, 9, 10, 12, 13, and 14, 18, 19, 20, and 21 of Freeman No. 20,203 are anticipated by the same references and for the same reasons stated by me in discussing, as a group, claims 1, 2, 3 and 4 of Freeman No. 20,203.

Q. 22. Will you state, beginning with claim 1 of No. 20,203 and going up through the group so far, what numbers those claims bore in the original patent, or, for instance, you have already said that claim 1 of this reissue was claim 2 in the original?

Mr. Allen: I will stipulate that a list may be put in evidence.

Mr. Rogers: All right.

Mr. Allen: Which gives a complete chart of that.

Mr. Rogers: Very good.

[fol. 775] Q. 23. I would like you to consider claim 10 a little more specifically.

A. Claim 10 recites a machine for cutting out predetermined portions of a shoe upper having in combination a

plunger, a work support, a cutting die mounted independent of the plunger, and means cooperating with the work support and with work supported thereon to act as a gauge in positioning substantially flatwise with relation to the cutting die, that portion of the work to be cut, said support having recesses to receive a portion of the work in other than a flat position.

This claim finds response in the patent to Newton heretofore identified, when provided with the columnar support disclosed in the patent to Wright, as referred to by the Court of Appeals for the First Circuit.

Q. 24. Now, I would like you to compare briefly, using the chart if you care to, claim 10 of Reissue No. 20,203 with former claim 74, which was disclaimed, and answer merely this question: Is there any—

The Witness: (Interrupting) Wait a minute.

Q. 25. Is there any element that appears in claim 10 of the reissue that did not appear in original claim 74?

A. Apparently the element, a plunger, was recited in—originally recited in claim 10 of Reissue No. 20,203, that [fol. 776] is not recited in original claim 74 of—claim 74 of original Freeman Patent which was disclaimed.

Q. 26. I would like you to read the element in claim 10 beginning “a cutting die”.

A. “a cutting die mounted independent of the plunger, and”—

Q. 27. Now, do you find that that construction is inevitably present or not inevitably present in the claim 74 of the original patent? Let me ask you this: I think that claim 74 has guide means.

A. Claim 74 recites that the machine is provided with guiding means in the base of the machine, to guide the movement of the die as it is transferred from a work placing position to a work cutting position. In my opinion, this element defines the machine covered by original claim 74 to be of the type disclosed in the Newton Patent, for instance, in which the die is moved from a position of pressure beneath the plunger to a position of clearance remote from the plunger.

Q. 28. Well, now, you have said that claim 10 of No. 20,203 does not include the plunger—I beg your pardon—that claim 74 does not recite the plunger. Now, could the

construction of claim 74 be used without a plunger of some form or other?

[fol. 777] A. Well, it would be more desirable to have a plunger to operate the—to force the—pardon me—it would be more of a practical construction to have a plunger in the machine to engage the work and impale it upon the cutting edges of the die, but I suppose that—yes, I should think that a plunger was absolutely an essential element of the machine defined by claim 74.

Q. 29. Have you, in your experience, seen a lot—seen a number of cut-out machines?

A. Oh, I have seen possibly many types of different cut-out machines.

Q. 30. Did you ever see one that did not have a plunger?

A. Well, that is a question. Sometimes the die is mounted upon a head called a plunger. Sometimes the die is mounted on a head and reciprocated vertically to engage the work mounted upon a supporting striking plate. Sometimes the work on the supporting striking plate is elevated vertically to engage the work with the cutting edges of the die mounted in a stationary manner on a part similar to a plunger, but ordinarily there must be some element which, particularly in a die in which the cutting edges are upstanding, there must be some element to impale the work upon the cutting edges of that die, and that part that so impales the work may be designated as a plunger, [fol. 778] a pressure applying means, or various other mechanical terms that describe accurately its construction and mode of operation.

Q. 31. All right. Now, I wish you would discuss claim 12 of No. 20,203 a little more specifically.

A. This is one of the claims that I included or grouped with the group 1, 2, 3, and 4. It recites work supporting means, cutting devices having cutting edges, pressure applying means, and backing material toward which the cutting edges are directed, said machine providing, for a portion of the work, substantial work receiving spaces disaligned from the plane of operation.

Q. 32. Now, as to backing material: I don't know that I have heard any testimony here before in regard to that. What is the backing material?

A. The backing material in the patent to Newton, which I used as a basic reference, is disclosed in Figure 5, the reference numeral being 10.

Q. 33. All right. Now, I will ask you to look a little more directly at claim 19 of the Reissue No. 20,203. Does that claim have any element in it that is not present in the previously discussed claim, such as claim 1 of this reissue?

A. If I understand your question correctly, it is my testimony [fol. 779] that claim 19 and claim 1 are directed to the same structure built up from the patent to Newton and the patent to Wright, in the manner that was done by the Court of Appeals for the First Circuit.

Q. 34. All right. Now, I will ask you to look at claim 20 of the reissue, which I believe is claim 53 of the original.

A. That was not a claim — pardon me — yes. I don't remember now whether I included that in the group of claims 1, 2, 3, and 4 or not, but if I did not, I intended it should be so grouped.

Q. 35. I notice that this claim includes a mechanical element called "driven element", and it also includes a driving element, and it includes clutch means adapted to engage the driving and driven elements. Now, assuming that clutch means are familiar in a number of arts, which I think we are justified in doing, have you ever seen a clutch member that did not have a driving element on the one hand and a driven element on the other?

A. Generally, the clutch mechanism comprises a driver and driven elements. Just whether or not I have seen a clutch different from that —

Q. 36. Well, that is familiar, in any event?

A. I could not say. I say that claim 20 responds to the same references and for the same reasons that I stated [fol. 780] in claims 1, 2, 3, and 4, that is, because the last element, "Means for normally preventing actuation of the clutch", is an extremely broad limitation, in that it does not exclude the treadle operated clutch actuating rod of Newton, in that usually a spring is connected with the treadle rod and this spring holds the treadle rod and the clutch actuating mechanism out of engagement in the general machine of this type. The limitation, however, was directed more specifically than that in the Freeman construction, and in that respect it would correspond to the patent to Schwalbach, which I have identified heretofore. In the Schwalbach construction, there is a device roughly shown in Figure 2, the elements of which are numbered

90 and 91, respectively. When the parts 90 and 91 are in the position of Figure 2, that downward pull on the clutch rod 13 will throw the clutch into operation and connect the driving element with the driven element. If, however, the multi-faced die support and the multi-faced plunger or plunger applying means are not rotated into their proper operating position, the downward pull on the rod 30 would cause the part 91 to engage the part 90 and thus prevent the clutch from being thrown into operation.

[fol. 781] Q. 37. I notice also that claim 20 recites something which I shall in general paraphrase as an elevated die or anvil, or whatever you may want to call it, in addition to the clutch. Is the operation of the clutch changed or not by the fact that it is combined with an elevated die, rather than one that is not elevated?

A. I should say that they were functionally indifferent.

Q. 38. Now, will you continue considering additional claims?

A. Claims 15, 16, 17, are directed to the third group of claims, or rather, related to the third group of claims set forth by the Court of Appeals for the First Circuit, on page 427 of the decision, in the Premier case, 84 F. (2d) 425. Claim 15 recites:

“A machine for ornamenting shoe upper material, comprising a movable support for shoe upper material, cutting means mounted on said support, a driven element, pressure applying means connected with said driven element, a driving element for said driven element, a safety clutch mechanism provided with means for preventing actuation of the driven element by the driving element until said work support is in operating position.”

In view of the fact that the movability of the [fol. 782] support is not limited to a support which moves in horizontal plane from a position of clearance to and from a position of pressure, claims 15, 16, and 17 find complete in the patent to Schwalbach, whose support merely moves about a horizontal axis, but these claims are all directed to the clutch locking means and the devices for releasing the clutch locking means as the work support reaches the limit of its movement to operating position. I think that properly claims 15, 16, and 17 should be

grouped with claim 20, with respect to my discussion of the patent to Schwalbach.

Q. 39. Now, claim 18 has an expression in it which I wish you would explain, mechanically, which is that:

“said pressing and work supporting members being constrained to move relatively in two directions normal to each other.”

A. In the Freeman machine, the pressure applying means reciprocates vertically.

Q. 40. That is the familiar plunger?

A. And a guideway, as shown particularly in Figure 4 of the Freeman Patent Reissue No. 20,203, calling attention to the face plates or cover plates for the No. 22. This figure, Figure 4 of Freeman No. 20,203 also shows guideways indicated generally at 26 in Figure 4, so that the [fol. 783] constraining action you inquire about simply means that—pardon me—what claim was that?

Mr. Satherland: 18.

Q. 41. That was claim 18.

A. Merely means that the plunger is constrained to move in one direction and the work support is constrained to move in another direction, these two directions being normal to each other.

Q. 42. Well—

A. (Interrupting) That is, by normal is meant that one movement is vertical and the other is horizontal.

Q. 43. The same thing, or is the same thing true of the Knight tip press which we have in court?

(The witness starts to go to the machine.)

Q. Well, just in a general way.

A. Well, I want to look at it.

(The witness examines the said machine.)

A. Yes.

Q. 45. Now, do you have any further comments about the claim 18?

A. No. It is one of the claims that I included in the group 1, 2, 3, and 4.

Q. 46. Now, we have already discussed 19 and 20, so if you will continue there.

A. I have included 21 in the group 1, 2, 3, and 4. It [fol. 784] seems to me that the claims 24 and 25, and 26, are directed to substantially the same subject matter as claim 94 of the original Freeman Patent, which was disclaimed, and I think that the reasons given by the Circuit Court of Appeals for holding claims 62, 65 to 69, inclusive, and 94 of the original Freeman Patent, apply equally as well to claims 24, 25, and 26, bearing in mind that the Court, in referring to the prior art, stated that it was not necessary, in finding invalidity, to multiply references over the three specific references set forth in the second to last paragraph of the reported decision of the Circuit Court of Appeals for the First Circuit.

Q. 47. Now, in claim 27, of No. 20,203, I notice a mention of a pivoted holddown plate. I also notice that the claim includes a presser member. Do you remember claim 7 of Reissue No. 20,202, or claim 19 of the original patent?

A. Yes.

Q. 48. Well, now, would the presser member be present in the use of the structure defined by claim 19 of the original patent, or not? A. Under ordinary conditions, yes.

Q. 49. All right. Do you have any other remarks about these claims, referring back to the No. 20,203?

A. I do not remember if I included claim 28 of the Freeman Reissue No. 20,203 in the group, in the same [fol. 785] group as 1, 2, 3, and 4, but if I did so—well, just a minute—when I said 28, include 29, 30, 31, 32, and 33. That will be claims 28, 29, 30, 31, 32, and 33, but if I did not do so, I do so now.

Q. 50. I would like to take claim 32 up a little more closely and perhaps ask you a question or so about that. I notice, first, that it includes a pressing member; well, first, I would like to notice that it was claim 87 of the original. I should like to compare it briefly with claim 74 of the original which was disclaimed, and ask you whether there are any elements present in claim 87 that were not present in disclaimed claim 74?

A. There are two elements recited in claim 87 of the original patent, now claim 32 of Reissue No. 20,203, which are not recited in original claim 74 which was disclaimed.

Q. 51. And what are those elements, please, Mr. McDermott? A. A bed and a pressing member.

Q. 52. Now, what is the bed of the die cutting machine of this type?

A. It is the rigid part of a framework from which, in some manner, the work support is mounted.

Q. 53. Are they common to many die cutting machines, in one form or another?

A. Yes. It is the bed which really resists the penetrating [fol. 786] and perforating—penetrating and piercing pressures of the engagement of the cutting edges of the die with the work.

Q. 54. Is there a bed present in the Newton Patent?

A. Yes.

Q. 55. Now, the other element that distinguishes between claims 30 and 32 and former claim 74 was the presser member. I don't think you need to comment further about that. You can continue with your remarks.

A. Unless I have inadvertently omitted some claim from my discussion, the remaining claims 34, 35, 36, 37, 38, and 39 are claims which appear for the first time in the Freeman Reissue Patent No. 20,203, and are directed to methods of manufacturing shoes. I have studied the original Freeman patent, and I can find no statement manifesting any intention by Freeman to claim any method of manufacturing shoes.

Q. 56. Well, now, do you know of anything that indicates, with some force or no force, that Freeman definitely did not intend to claim a method in this patent No. 1,681,033?

A. Yes. I find in the paragraph, commencing page 46, of page 1 of the original Freeman patent, a direct reference [fol. 787] to the Freeman patent No. 1,675,295 granted to Freeman June 26, 1928.

Mr. Rogers: Now, on the record, the witness meant line 46, at page 1.

The Witness: 46 et seq.

Q. 57. Yes. Have you investigated the patents referred to there in the original specification?

A. I have examined the Freeman patent No. 1,675,295 together with a history of the application which matured into that patent, and I find that Freeman presented to the Patent Office—

Mr. Sutherland: If Your Honor please, I think the history and the patent itself are the best evidence of that, and I object to the witness' testimony as hearsay.

Mr. Rogers: We offer in evidence a certified copy of the file obtained from the Patent Office of the Freeman Patent No. 1,675,295, granted June 26, 1928, and ask that it be marked Defendants' Exhibit M.

(The said document was marked by the reporter as Defendants' Exhibit M.)

Mr. Allen: Subject to my objection.

The Court: Yes. It will be so regarded.

Mr. Allen: Sir?

The Court: It may be so regarded.

[fol. 788] Mr. Allen: As part of the testimony to which I have a running objection.

Mr. Rogers: That is all right, Mr. Allen.

Mr. Allen: We have got a printed copy of that in the record—

(Here ensued some colloquy.)

The Witness: Yes.

Mr. Rogers: That is offered in evidence as Exhibit M.

Mr. Allen: Certified copy that counsel has just put in appears as part of Exhibit L.

(Physical Exhibit.)

(Defendants' Exhibit M is omitted from the printed record at this place [purusant] to an order of the United States Circuit Court of Appeals of March 10, 1942.)

[fol. 789] Q. 58. In this file, are there any particular parts to which you should like to have the record make reference in connection with what you have just testified?

A. Claim 1 as originally presented to the Patent Office, and the application which matured into the Freeman Patent No. 1,675,295, Defendants' Exhibit M, reads as follows:

Mr. Sutherland: Now, if Your Honor please, it seems to me we are just wasting a lot of time to have him read out of those records. They speak for themselves.

Mr. Rogers: Well, it won't be necessary to read out of the record then.

Q. 59. Let me ask you this question: Do you find that, mechanically, there are recitations of steps in that claim 1 that are similar to the steps recited in any of the method claims present in Reissue No. 20,203?

A. Yes. However, I did not understand what you meant by the word "mechanically", as applied to—

Q. 60. (Interrupting) Well, I meant process there.

A. Will you reframe the question, please?

Mr. Rogers: Mr. Reporter, will you let me have that question?

(The question was repeated by the reporter.)

[fol. 790] Mr. Allen: Why not ask it over again?

Q. 61. By mechanically, I mean as distinguished from legally, that is all. A. Yes.

Q. 62. All right. Now, continue with your comment.

A. Well, I have no other—I have no further comment to make, other than to say that it would seem, or in view of my study of this history, Defendants' Exhibit M, in my opinion Freeman attempted to patent a method directed to the same subject matter as the methods defined in claims 34 to 39, both inclusive, of the Reissue Patent No. 20,203.

Q. 63. Was claim 1 allowed in the file of the No. 1,675,295 patent? A. No, it was not.

Q. 64. All right. Now, I should like to ask you this: Referring to claim 34 of No. 20,203: Suppose—I will put the question this way: I shall read you certain elements, and ask you their relationship to elements that you have already discussed. "A machine for cutting openwork designs in shoe uppers, . . . comprising a bed, pressure applying means, a work support, a cutting die", and so forth, to the end of the claim. Are there any mechanical elements present in that claim, as I have indicated, that [fol. 791] are not present in, for instance, claim 1, and, therefore, in those structures you have considered in connection with claim 1 of this reissue? A. Yes.

Q. 65. What, for instance?

A. I beg your pardon. I meant to say no.

Q. 66. Therefore, the only distinction that claim 34 offers is—

Mr. Sutherland: (Interrupting) Now, I object to this question, Your Honor, before it is finished, because he did not read the complete claim previously.

Mr. Rogers: I was going to ask him a point that I think will clear Mr. Sutherland's troubles.

The Court: Overrule the objection.

Q. 67. Therefore, claim 34, which includes, beginning in line 2 thereof, the following:

"... according to a process in which said uppers are made up of two or more pieces of flat material attached together with a lining such that the combined pieces cannot be placed in flat position, and without the desired design being cut in said work."

Such portion as I have just read is the only thing that differs in that claim over previously considered claims.

Mr. Sutherland: I object to that as leading.

The Court: Sustained.

[fol. 792] Q. 68. Well, I will put the question this way then: What differences do you find in verbiage of claim 34 [of claim 34], what mechanical elements of claim 34 or process elements of claim 34 that differ from the elements of a claim such as claim 1 of this reissue?

A. Personally, I feel that the phrase "according to a process in which said uppers are made up of two or more pieces of flat material attached together with a lining such that the combined pieces cannot be placed in flat position, and without the desired design being cut in said work" is correctly a part of the title to the claim and is simply something tacked on the phrase "A machine for cutting open-work designs in shoe uppers", and merely is directed to the general classification of the invention to which the machine recited in the claim 34 is directed.

Q. 69. Now, remembering the mechanical elements of claim 1 and the claims considered in connection therewith, could those mechanical elements of claim 1 be used, "according to a process in which said uppers are made up of two or more pieces of flat material attached together with a lining such that the combined pieces cannot be placed

in flat position, and without the desired design being cut in said work"?

[fol. 793] A. May I have that question again?

(The question was repeated by the reporter.)

A. In my opinion, the machine defined in claim 1, and others in the same group, were designed and intended to be used according to a process in which the uppers are made up of two or more pieces of flat material attached together with a lining such that the combined pieces cannot be placed in flat position, and without the desired design being cut in said work.

Q. 70. Now, Mr. McDermott, did you include claim 40 in your discussion, or not? I just was not clear on that.

A. I should have included claim 40 in the group 36, 37, 38, and 39, and I should not have included claims 34 and 35, in the method group of claims. Claim 35, however, as well as claim 34, should be included in the group 1, 2, 3, and 4, and be subject to the same references and the same reasons cited by the Court of Appeals for the First Circuit in holding the machine group of claims relied upon in the Freeman-Premier suit to be invalid.

Mr. Rogers: Your witness.

Mr. Allen: I should like to hear that last paragraph.

(The last paragraph of the witness' answer was repeated by the reporter.)

[fol. 794] Cross Examination.

By Mr. Allen:

XQ. 1. Mr. McDermott, there were no claims, were there, in the Premier suit involving a complete combination of the die press and die? You can help me out on that. There were not, were there?

Mr. Rogers: Do you want me to tell you?

Mr. Allen: Yes. I told him the answer.

Mr. Rogers: I do not believe any claims in the Premier suit possessed the presser, if that is what you mean, but so far as—

Mr. Allen: (Interrupting) That is all right. Complete combination.

The Witness: Yes, I think they do include a complete press.

XQ. 2. Pick out one. A. 73, for instance.

XQ. 3. 73. All right. That is a claim for a die that is used in a machine for cutting out designs, isn't it?

A. No, it is not. It is for a machine for cutting openwork in shoe uppers which have been stitched to form a closed piece of work.

XQ. 4. You don't contend that that claim is a complete combination machine and the die together in a press?

A. I do.

[fol. 795] XQ. 5. Do you find any presser member in that claim? A. It is inferred.

XQ. 6. I mean is it in the claim?

A. By inference, yes. The phrase, "the design to be cut in the upper", and the phrase, "said die to act as a guide in positioning that portion of the work to be cut with relation to the cutting die", all indicate that by inference the machine is provided with some means for cooperating with the work to force the cutting edge of the die through the work.

XQ. 7. Not included, though, as a positive element?

A. No.

XQ. 8. No. Do you find any others like that?

A. Why, I would say that claim 72, 74.

XQ. 9. 74 calls for a die, doesn't it?

A. It calls for more than a die. A die for a machine in combination with devices, guiding devices, supporting means for the cutting members.

XQ. 10. That claim is all about a die, isn't it? A. No.

XQ. 11. Construction of a die with a groove for it to slide in, and stuff of that kind. Instead of groove, I should say with a guide for it to slide.

A. No. The guiding devices come for the work independently of the die.

XQ. 12. So in your opinion that is not a die claim?

A. I would say it was a machine claim.

XQ. 13. Now, did you mention 72? A. I believe I did.

XQ. 14. Well, was that claim before the Court of Appeals of the First Circuit?

Mr. Rogers: Oh, I think that is hardly necessary. It must have been. You ought to know that.

Mr. Allen: Well, I am asking him. I don't know this minute whether it was or not. He mentioned it.

A. Whether it was or not, it was a disclaimed claim.

Mr. Allen: Oh, I see. That is all.

Mr. Rogers: That is all, Mr. McDermott.

Mr. Rogers: Now, if the Court please, the matter of the additional license agreements on the Freeman machine are still open, but I think Mr. Allen is going to furnish us with one copy of each and every type that is now in evidence. Is that right, Mr. Allen?

Mr. Allen: Yes.

Mr. Rogers: And then one other matter which is open is the matter of the pleadings in the contempt proceeding, [fol. 797] Freeman versus Premier, which was reported at 145 Federal Supplement.

Mr. Allen: What has that got to do with this counterclaim?

Mr. Rogers: Well, I mean—

Mr. Allen: Well, I mean we are trying the counterclaim now.

Mr. Rogers: Well, we are otherwise finished up. Just wanted to get those matters straight before we close our case now.

Mr. Allen: Oh!

Mr. Rogers: And it is our desire to put in a paper entitled "An amended answer", and we are willing to have the plaintiff put in additional papers it cares to.

Mr. Allen: Well, I don't know what to do. There is a lot in this case. Checked through all kinds of records. Contempt hearing down there. We have got the die, if you have got the decision of the Court. Now it just happens that ten days, I think it was, or something like that, after we tried the contempt hearing, the other side filed a paper that—the Premier Company filed a paper which counsel now wants to put into this case, which said that if the Court would relieve them of any damages in the

case, why they would be willing to quit making the [fol. 798] accused dies. Now, I want to object to putting it in here, and I think if they put that in, it makes an entirely false impression in this case, and to correct that false impression we will have to put all pleadings, evidence and everything else in the case in here, and I think it is absurd, and I don't think it is needed in here.

Mr. Rogers: I think the pleadings will probably be enough. I don't care about the evidence. The die is in. Plaintiff has put the die in. Plaintiff has put in what purports to be work associated with the die, and as if to say theirs is the whole thing. Now, our position is that the Premier Company agreed that this die could go in, they would quit making it provided they would allow them—they would hold four or five other dies clear of the license and would give them a break on the costs of the—

Mr. Allen: (Interrupting) Just a moment, if the Court please. Do you mind if I address counsel for the other side?

Mr. Rogers: Wait, Mr. Allen. Is this off the record or not?

Mr. Allen: No. Here is a transcript of the evidence I happen to have. I notice it is dated May 17, 1937. [fol. 799] Now, what is the date of your paper that you want to put in?

Mr. Kingsland: You have got it, Mr. Allen.

Mr. Allen: What?

Mr. Kingsland: We handed it to [your] for examination.

Mr. Rogers: I handed it to you for examination. Isn't this it? Yes.

Mr. Allen: I have a copy of it here in my file, dated June 1, 1937. That is, this hearing was in the middle of May, and this paper was filed in June.

Mr. Rogers: All right.

Mr. Allen: Now, what could that have to do—what earthly sense is there in encumbering this record with that?

Mr. Rogers: Well, of course the thing of it is, the decision came after the 1st of June.

Mr. Allen: Well, we can read the decision and see whether the Court considered that counsel for the other side made an agreement.

Mr. Rogers: Well, now, are you conceding what I have stated, that the position of the Premier Company was that they would stop making the die such as, I presume this one here, Exhibit No. 47?

[fol. 800] Mr. Allen: That they would be willing to stop the Exhibit No. 47, if the Court would relieve them of any expenses or anything for contempt.

Mr. Rogers: And also, I think, something in regard to exhibits 1 to 4, and 6.

Mr. Allen: Yes. I wanted the Court to pass on some other exhibits, and the Court would not do it.

Mr. Rogers: I beg your pardon. The Court said Exhibit No. 5 was the only one could possibly be held.

Mr. Allen: No. The Court said he would not pass on any exhibits—oh, well—Your Honor, I don't see how the question can be passed on without getting a copy of the Federal Supplement and looking at it.

Mr. Rogers: I have it.

Mr. Kingsland: Well, here it is, right here. The District Court decided the contempt case on February 28, 1938, and I understand had this other paper before him at the time. It was June 1, 1937.

Mr. Allen: In reaching these conclusions, this is what the Court said in his decision:

"In reaching these conclusions, I have not taken into consideration the later pleadings of the defendant, whereby it consents to a decree upon certain conditions. The defendant has intimated that if any sum is awarded by way of compensation, he desires a further hearing. I can see nothing to be gained by such a hearing and very likely, in view of the amount involved, the defendant would not feel inclined to press this request."

Mr. Rogers: That was on a different point.

Mr. Allen: Was it?

Mr. Kingsland: Yes, indeed.

Mr. Allen: It was not.

"I find that a fee of a hundred dollars would be adequate and pay for the filing of the petition and that, therefore, plaintiff is entitled to a decree requiring the payment to the plaintiff of that sum."

"In reaching these conclusions, I have not taken into consideration the later pleadings of the defendant"—

That is the one you ask to put in?

Mr. Rogers: That is right. It is all right on that particular point, because the effort of the Premier Company was not to get any costs for the appeal.

Mr. Allen: Well, I object to that kind of business going in; I don't think it helps us in any way.

[fol. 802] The Court: I don't know anything about it. Overrule the objection for that reason.

Mr. Rogers: Well, Mr. Allen, will you agree that the paper I hand you here is a proper copy?

Mr. Allen: Yes. You will agree that it was filed two weeks after the hearing in the case?

Mr. Rogers: I will let you state on the record what the date of hearing was.

Mr. Allen: All right. The date of the hearing, as shown by the stenographer's records before Judge Brewster, was May 17, 1937. The document which counsel is now offering is dated June 1, 1937.

Mr. Kingsland: And the District Court decided the case on February 28, 1938, and had a rehearing on May 24, 1938, some six months after the paper had been filed.

Mr. Allen: Yes, the decision was handed down.

Mr. Rogers: I offer this paper entitled "Defendant's Amended Answer", etc., in Freeman versus Premier, as Defendants' Exhibit N.

(The said document was marked by the reporter as Defendants' Exhibit N, and is, in words and figures, as follows:) (Physical Ex.)

(Defendants' Exhibit N is omitted at this place in the printed record pursuant an order of the United States Circuit Court of Appeals of March 10, 1942.)

[fol.803] Mr. Allen: If the Court please, I would prefer very much to present our points in connection with the position that is taken by the plaintiff, so far as this counterclaim is concerned, in our briefs, rather than to put a witness on the stand to discuss the opinion, and so forth and so on, and that being so, and with the proofs which have been adduced up to now in this case in connection with their counterclaim, I don't propose to take any additional testimony. Now then, I don't think it would be fair, under the circumstances, for me to make a motion to dismiss the counterclaim, in other words, demurrer to the evidence, because part of the evidence I put in and part they put in, and it is all mixed up, and they chose to try it doubled, and I won't take advantage of that. I don't propose to put on any expert on the law.

The Court: All right. The case, so far as the taking of evidence is concerned, is over.

Mr. Allen: That is right.

Mr. Kingsland: Yes, sir.

The Court: Closed.

Which Was All the Evidence Offered in the Case.

[fol. 804] Stipulation and Order for Transmittal of the
Records, Proceedings and Evidence.

(Filed January 7, 1942.)

In the United States District Court
Eastern District of Missouri
Eastern Division

Benjamin W. Freeman, and The
Louis G. Freeman Company,
Plaintiffs,

vs.

A. W. Altvater and The Western
Supplies Company,
Defendants.

In Equity No. 11,629

It Is Stipulated by and between counsel for the respective parties on appeal that the Clerk of this Court in accordance with Rule 75 of the Rules of Civil Procedure, shall transmit to the Clerk of the Circuit Court of Appeals for the Eighth Circuit, the following designated portions of the record, proceedings and evidence in this cause, together with all exhibits annexed to papers, certifying those portions thereof that are necessary to be certified pursuant to said Rules of Civil Procedure, or pursuant to the Rules of said Circuit Court of Appeals:

A. Reporter's transcript of the evidence and proceedings taken at the trial of this cause.

B. True copies of the following pleadings and documents on file:

[fol. 805] 1. Bill of Complaint filed 12-5-35 with Plaintiffs' exhibits 9 and 10 attached.

2. Defendants' Motion to Strike filed 12-28-35.

3. Motion for Leave to Amend the original Bill of Complaint, filed 1-13-36.

4. Order of January 13, 1936, granting above Motion.

5. Answer to Bill of Complaint as amended, filed 2-1-36.

6. Interrogatories by defendant 2-20-36.

7. Plaintiffs' Motion for Particulars 2-21-36.

8. Plaintiffs' Interrogatories with photos 1-A, 1-B, 2-A and 2-B attached, 2-21-36 (Plaintiffs' Ex. 6).

9. Plaintiffs' Answer in part and Objections in part to Defendants' Interrogatories, omitting "Remarks" 2-28-36.

10. Stipulation 3-12-36.

11. Defendants' Answer to Plaintiffs' Interrogatories 4-16-36, (Plaintiffs' Ex. 7).

12. Amended Interrogatories by plaintiffs 5-19-36, and Defendants' Answers thereto 6-11-36 (Plaintiffs' Ex. 8).

13. Supplement to the Bill of Complaint filed 6-5-37.

14. Answer to the Supplement to the Bill of Complaint filed 10-6-37.

15. Motion of the Plaintiffs to Strike or Dismiss from the Answer to the Supplement to the Bill of Complaint filed 10-25-37.

[fol. 806] 16. Order on above Motion filed 3-1-38.

17. Reply to the Counterclaim of Defendants filed 3-17-38.

18. Defendants' Motion for Judgment filed 6-19-39, and to be imprinted at the conclusion thereof, "This motion was subsequently overruled by the Court."

19. Plaintiffs' Answer to Defendants' Interrogatories filed 12-21-39.

20. Defendants' Amendment to the Answer filed by Leave 2-7-40.

21. Defendants' Motion to Admit Further Evidence, filed 5-16-40 and exhibits attached.

22. Defendants' Interrogatories in reference to Machine Licenses filed 5-16-40.

23. Memorandum for Clerk, filed 7-1-40.

24. Plaintiffs' Answer to Interrogatories as of Memorandum of 7-1-40, filed 7-18-40 and exhibits attached.

25. Findings of Fact and Conclusions of Law, filed 11-14-41.

26. Judgment entered Nov. 14, 1941.

27. Notice of Appeal to Circuit Court of Appeals.

28. Bond on Appeal.

29. This Stipulation.

C. All of Plaintiffs' physical and true copies of the documentary exhibits from 1 to 53 inclusive.

D. All of Defendants' physical and true copies of the documentary exhibits from A-1 to N inclusive.

[fol. 807] It Is Further Stipulated that the parties hereto shall not file two copies of the reporter's transcript as provided in Rule 75 (b).

Dated this 7 day of Jan., 1942.

BRUNINGA AND SUTHERLAND,
Attorneys for Plaintiffs.

KINGSLAND, ROGERS & EZELL,
Attorneys for Defendants.

It Is So Ordered this 7th day of January, 1942.

JUDGE DAVIS,
United States District Judge.

[fol. 808] Cost Bond on Appeal.
(Filed January 10, 1942.)

Know All Men By These Presents:

That we, Benjamin W. Freeman and The Louis G. Freeman Company, as Principals, and the American Surety Company of New York, as Surety, are held and firmly bound unto A. W. Altvater and Western Supplies Company in the sum of Two Hundred and Fifty Dollars (\$250.00), to be paid to the said A. W. Altvater and Western Supplies Company, its successors and assigns, for the payment of which well and truly to be made, we bind ourselves, our successors and assigns, firmly by these presents.

Whereas, Benjamin W. Freeman and The Louis G. Freeman Company, plaintiffs, have appealed to the United States Circuit Court of Appeals for the Eighth Circuit from a certain Judgment, signed and entered by the Honorable Charles B. Davis, one of the Judges of this Court, at St. Louis, Missouri, on November 13, 1941.

Now, the condition of the above obligation is such that if [fol. 809] the said Benjamin W. Freeman and The Louis G. Freeman Company shall prosecute said appeal to effect and shall pay all costs of said appeal, if the said appeal is dismissed, or the judgment appealed from is affirmed, or all costs which the Appellate Court may award against said Benjamin W. Freeman and The Louis G. Freeman Company, if said judgment is modified, then the above obligation to be void; otherwise to remain in full force, virtue and effect.

Executed at St. Louis, Missouri, this 8th day of January, 1942.

BENJAMIN W. FREEMAN,
THE LOUIS G. FREEMAN COMPANY,
By J. H. SUTHERLAND,
Attorney.

AMERICAN SURETY COMPANY OF
NEW YORK,
By O. L. KINCHELOE,
Resident Vice President.

Attest: FANNY KENNEDY,
Resident Assistant Secretary.

[fol. 810] Stipulation With Reference to the Transmission of Certain Documentary Exhibits as Physical Exhibits.

(Filed January 24, 1942.)

It is hereby stipulated and agreed by and between Counsel for parties for the above entitled Cause, the Honorable Court consenting, that Plaintiffs' Exhibits Nos. 20, 21, 22, 23, 24, 28, 33-A, 33-B, 33-C, 37, 38 and 42, and Defendants' Exhibits A-1 to A-23 inclusive, L, M and N, because of their bulk and the other difficulties of reproducing same

for the transcript shall be regarded as physical exhibits and the originals thereof transmitted to the Court of Appeals in Physical form as part of the transcript from this Court.

BRUNINGA AND SUTHERLAND,
Attorneys for Plaintiffs.
KINGSLAND, ROGERS & EZELL,
Attorneys for Defendants.

It Is So Ordered This 24 day of January, 1942.

CHARLES B. DAVIS,
United States District Judge.

[fol. 811] (Order extending time to file Transcript.)
(Filed January 30, 1942.)

On application of plaintiff, it is hereby ordered that the time in which plaintiff may file its record of Appeal and docket the above entitled cause in the United States Circuit Court of Appeals of the [Eight] Circuit be, and it is hereby, enlarged and extended for a period of thirty days so as to expire March 3, 1942.

CHARLES B. DAVIS,
United States District Judge.

[fol. 812] (Order for Transmission of Original Exhibits to Appellate Court.)
(Filed February 7, 1942.)

Upon application of Plaintiff, the Clerk of this Court is hereby authorized and directed to remove from the files of this Court, and deliver to the Clerk of the United States Circuit Court of Appeals for the Eighth Circuit all of the physical exhibits which were received in evidence in the above entitled cause.

Signed at St. Louis, Missouri, this 7th day of February, 1942.

CHARLES B. DAVIS,
United States District Judge.

[fol. 813] (Stipulation for transmission of certain exhibits to Appellate Court and Approval thereof.)
(Filed February 18, 1942.)

It is hereby stipulated and agreed by and between Counsel for the parties to the above entitled Cause, the Honorable Court consenting, that Plaintiff's Exhibits Nos. 30, 31, 32, 35, 41 and 46, because of their bulk and other difficulties of reproducing the same for the transcript shall be transmitted to the Court of Appeals in physical form as a part of the transcript from this Court.

BRUNINGA AND SUTHERLAND,
Attorneys for Plaintiff.

KINGSLAND, ROGERS & EZELL,
Attorneys for Defendants.

It Is So Ordered This 18 day of February, 1942.

CHARLES B. DAVIS,
United States District Judge.

[fol. 814] (Clerk's Certificate to Transcript.)

United States of America,
Eastern Division of the Eastern
Judicial District of Missouri—ss.

I, James J. O'Connor, Clerk of the District Court of the United States within and for the Eastern Division of the Eastern Judicial District of Missouri, Do Hereby Certify the above and foregoing to be a full, true and complete transcript (except insofar as the same is restricted by the designation of the record on appeal heretofore set out) of the record and proceedings in case No. 11,629, wherein Benjamin W. Freeman and The Louis G. Freeman Company are plaintiff's and A. W. Altvater and The Western Supplies Company are defendants, as fully as the same remains on file and of record in my office.

In Testimony Whereof, I have hereunto subscribed my name and affixed the seal of said Court at office in the City of St. Louis, in said Division of said District this 19th day of February, in the year of our Lord, Nineteen Hundred and Forty-Two.

JAMES J. O'CONNOR,
Clerk, U. S. District Court,

(Seal) By JOHN J. JARVIS,
Deputy Clerk.

Filed Feb 23 1942 E. E. Koch Clerk

[fol. 815] Statement of Points on Appeal.

United States Circuit Court of Appeals
For the Eighth Circuit

Benjamin W. Freeman, and The Louis G. Freeman Company,	}	No. 12,241.
Appellants,		
v.		
A. W. Altvater and The Western Sup- plies Company,	}	
Appellees.		

Upon the appeal herewith of the above entitled cause, the appellant proposes to rely upon the following points:

1. The Court erred in not finding that devices of the appellee, in accordance with Exhibits 1, 2, 3A, 4 and 5, were infringements of Reissue patent No. 20,202, and hence, fell within the license contract in effect between the parties.

2. The Court erred in finding that the contract of January 1, 1929 was terminated as of December 8, 1936, and that the said contract was not continued by the acts of the parties under appellants' Reissue patents, whether said continuance is to be termed a new contract or not.

3. The Court erred in finding that appellant was evicted from any patent monopoly by decision in Freeman v.

Premier Machine Co., either on June 5, 1936 or on any other date.

[fol. 816] 4. The Court erred in finding that any "eviction" restrained appellant from claiming scope for a mask die beyond that set forth by the Court in its Findings of Fact.

5. The Court erred in finding that a disclaimer of November 11, 1936, which was filed during the pendency of Reissue patent application by appellant of its patent involved in this cause, [et] up any "facts" which became "fixed and unchangeable".

6. The Court erred in finding that the original patent No. 1,681,033 became invalid on November 11, 1936, said patent having subsequent to that date been tendered back to the Commissioner of Patents, for reissue.

7. The Court erred in finding that Reissue patents 20,202 and 20,203 were invalid.

8. The Court erred in dismissing the bill of complaint and the supplement thereto.

9. The Court erred in finding the issue on counterclaim of appellee in favor of appellee, and in granting the counterclaim. Such a catch-all decree is furthermore without precedent or meaning.

10. The Court erred in awarding costs to the appellees.

11. The Court erred in not finding that by the acts of the parties, the contract in suit was still in existence.

12. The Court erred in finding that appellants' patents were invalid in a cause pending between a licensor (appellant) and his licensees (appellees).

[fol. 817] 13. The Court erred in passing on the validity of the patents in this cause even if the bill was dismissable because the contract had been cancelled, because there was no issue between the parties which could [involve] the validity of the patents of the appellants. In view of the Court's finding as to the contract, it should have dismissed the bill and left the parties to [litigation], if instituted by appellants for adjudication of the patents.

14. The Court erred in its construction of what a mask die of the Freeman invention consists of.

15. The Court erred in discussing the prior art and [contruing] the claims of appellants' patent on mask dies, as it did in view of the fact that the Court of Appeals had already passed upon said question and construed said claim in *Freeman v. Altvater*, 66 Fed. 2nd 506, same being a litigation between the same parties involving the same claim, although against a different object contended to fall within it.

16. The Court erred in relying in its decision upon statements to be found in the case of *Freeman v. Premier* in the First Judicial Circuit, and utterly ignoring the decision of this Court of Appeals in the Eighth Judicial Circuit in *Freeman v. Altvater et al.* (i. e. this appellant v. these appellees).

17. The Court erred in finding contrary to the proofs that payments by appellees to appellants under the contract in suit revised by the acts of the parties to replace the original Freeman patent, with the reissue Freeman patents, had been under protest. Also the Court erred in referring to numerous legal actions as a protest against payment.

[fol. 818] 18. The Court erred in not finding that by its conduct and unprotested payment of royalties as called for in the contract in suit, the appellees had bound appellants from suing for patent infringement, wherefor appellees had bound themselves against contending that they were not licensees.

19. The Court erred in disposing of the several decision of this Court of Appeals, in *Freeman v. Altvater et al.* as not controlling his activity in the slightest with reference to appellants or his contract and patent rights.

20. The Court erred in finding that the refusal of this Court of Appeals to permit the filing of a bill of review as to its former decision in *Freeman v. Altvater et al.* was not made after a consideration of the merits of the matter set up therein. In fact, the proofs before the Court of Appeals upon the record on this present appeal, and the affidavit proofs before the Court of Appeals upon appellees' motion for leave to file a bill of review are substantially identical.

21. The Court erred in not finding that there was estoppel by judgment, and res adjudicata against appellees on many contentions in its counterclaim and defense in the present cause, in view of the ruling of the Court of Appeals on said motion for leave to file a Bill of Review.

22. The Court erred in finding that the suit of *Western Supplies v. Freeman*, 109 Fed. 2nd 693, does not contain elements of estoppel by judgment and res adjudicata of many [issued] involved in its counterclaim and defense in the present cause.

[fol. 819] 23. The Court erred in finding that plaintiff had attempted to monopolize and limit competition in unpatented dies and machines and was doing so at the time of the present suit.

24. The Court erred in its finding 30, which is entirely outside of precedent. In this finding the Court proposes to adjudicate a remaking of the contract in suit between the parties in case the Court's judgment is wrong on the [issued] decided. A District Court is beyond its powers on the issues decided. A District Court is beyond its powers and discretion in stating what it is going to rule if the Court of Appeals should reverse its decree. The finding is erroneous in any event because it constitutes the making of a new contract between the parties as to which their minds have admittedly not met.

25. The conclusions of law of the Court are in error in these particulars (1) *Defendants* have no right to limit scope of patents under which they operate as licensees. (2) Claim 6, the only claim involved in this litigation, is clearly infringed by the accused structure of appellees. (3) While defendants in suit on a license are entitled to set up an eviction based on an extraneous decree, thus avoiding the license, this cannot be done unless promptly availed of, surely not after five years of paying regular royalties without protest. (4) The *Freeman v. Premier* decision might have constituted an eviction of defendant if it had so elected to take the said decision. It did not do so. (5) The same observation applies to conclusion (5). (6) The attempt to read the decision in the *Premier* case [fol. 820] into the reissues of the *Freeman* patent, and the disclaimer filed incident to reissue proceedings as if in

some way rendering the reissues invalid, is incorrect in law. (7) The argument set forth in conclusion (7) holding the Freeman patent tender back to the Patent Office invalid a month before the reissues were granted is erroneous and without justification. (8) Conclusion number (8) follows the faulty logic of trying to reach the Freeman reissues which were granted by the Commissioner of Patents, through a technical construction of a disclaimer filed as a matter of form in connection with the reissue proceedings. (9, 10 and 11) These conclusions are erroneous being based on erroneous facts (12 & 13) the conclusion as to the decree in the original suit between the parties is erroneous in law and in the facts stated as to the present suit not involving matters adjudicated in said decree. (14) the conclusion that the ruling of this Court of Appeals on the motion for leave to file a bill of review contains the item of estoppel in the present case is flagrantly incorrect. (15) The conclusion as to the effect of *Western Supplies v. Freeman*, 109 Fed. 2nd 693 is bad in law. Whatever was concluded in that suit is binding between the same parties. (16) Conclusion 16 is erroneous, being as in the instance of parallel finding of fact, an attempt of the Court to state what it is going to do, if its decree should be held bad in some respects. (17) The doctrine of unclean hands does not apply in the present action because even if the facts recited in conclusion 17 were correct, no unclean hands toward appellees is noted. (18) The grant of the counterclaim in this conclusion is meaningless in view of the alternative nature of the prayers of the counterclaim.

Respectfully submitted,

By ALLEN & ALLEN,

Attorneys for Appellants.

MA:WEH

(Endorsed): No. 12,241. Statement of Points. Filed in U. S. Circuit Court of Appeals on February 23, 1942.

[fol. 821] (Stipulation that copies of certain original exhibits be included in copies of the printed record.)

United States Circuit Court of Appeals,
Eighth Circuit.

No. 12,241.

Benjamin W. Freeman, et al.,	}	Appeal from the District Court of the United States for the Eastern District of Missouri.
Appellants,		
vs.		
A. W. Altvater, et al.		

It is hereby stipulated by and between counsel for the respective parties that copies of the following original exhibits be inserted in the copies of the printed record at the places where referred to in the transcript of record certified by the Clerk of the District Court, viz:

Plaintiffs' Exhibit 16,
“ 17,
“ 30,
“ 31,
“ 32
“ 35
“ 41
“ 46.

JOHN H. SUTHERLAND,
Counsel for Appellants.

KINGSLAND, ROGERS & EZELL,
Counsel for Appellees.

(Endorsed): No. 12,241. Filed in U. S. Circuit Court of Appeals on March 4, 1942.

[fol. 822] (Stipulation that copies of certain photo stat exhibits and letters patents be inserted in only fourteen copies of the printed record.)

United States Circuit Court of Appeals
For the Eighth Circuit

Benjamin W. Freeman, and The Louis G. Freeman Company,	} Appellants,	No. 12,241
vs.		
A. W. Altvater and The Western Sup- plies Company,	} Appellees.	

It is hereby stipulated and agreed by and between counsel for the parties to the above entitled cause, the Honorable Court consenting, that those documentary exhibits, which it is necessary to reproduce photostatically or photographically, as well as copies of letters patent, be reproduced for the record in a quantity less than that required by the rules, to wit, fourteen copies (ten of such copies being for the Court, two for counsel for Appellant, and two for counsel for Appellee), that such reproductions be respectively inserted at their appropriate places in fourteen complete volumes of the printed record; and that the remaining volumes of the printed record be incomplete with respect to such reproductions.

JOHN H. SUTHERLAND,
Attorney for Appellants.

KINGSLAND, ROGERS & EZELL,
Attorneys for Appellees.

(Endorsed): No. 12,241. Filed in U. S. Circuit Court of Appeals on March 4, 1942.

[fol. 823] Application for an Order Dispensing With the
Printing of Certain Documentary Exhibits.

United States Circuit Court of Appeals
For the Eighth Circuit

Benjamin W. Freeman and The Louis
G. Freeman Company,

Appellants,

vs.

A. W. Altvater and The Western Sup-
plies Company,

Appellees.

No. 12,241

Now come Appellants and represent that the record in this cause includes a considerable number of documentary exhibits which were certified from the District Court as Physical Exhibits and which cannot [—] printed, or otherwise reproduced, save at great expense, to wit:

Exhibit 20. Printed Book (15 pages) "Petition for Leave to File a Bill in the Nature of a Bill of Review"—part of the record of this Court in No. 9602.

Exhibit 21. Printed Book (18 pages exclusive of copies of three patents) Affidavit record concerning proposed Bill of Review,—part of the record of this Court in No. 9602.

Exhibit 22. Printed Book (26 pages) "Answer to Petitioner's Suggestions in Support of Petition for Leave to File a Bill in the Nature of a Bill of Review" in No. 9602 in this Court.

Exhibit 23. Printed Book (22 pages) "Reply Memorandum and Affidavit for Petitioners" in No. 9602 in this Court.

[fol. 824] Exhibit 24. Printed Book (714 pages) Transcript of Record in Premier Machine Company, Inc., v. Benjamin W. Freeman in the United States Circuit Court of Appeals for the First Circuit.

Exhibit 28. Printed Book (33 pages) Transcript of Record in Western Supplies Company and Arthur W. Altvater v. Benjamin W. Freeman and The Louis G. Freeman Company, No. 7921, in the United States Circuit Court of Appeals for the Sixth Circuit.

Exhibit 33-A, B and C. Job Card, Order and Memorandum containing sketches, perforations, stamps, handwriting, and printed matter (5 pages).

Exhibit 37 Shoe Pattern (perforated paper.)

Exhibit 38. Job Card bearing sketches, perforations, handwritten and printed matter.

Exhibit 42. Job Card bearing sketches, perforations, handwritten and printed matter.

Exhibit L. Printed Book (65 pages) Record of Proceedings in the Circuit Court of Appeals for the First Circuit constituting Volume 2 of Record in the United States Supreme Court in No. 316, Freeman v. Premier Machine Company, Inc., October Term, 1936.

Exhibit M. File wrapper and contents of Freeman Patent No. 1,675,295. This is a different patent from that upon which the contract in suit was based. (36 sheets).

Exhibit N. [Typwritten] document entitled "In The United States District Court for the District of Massachusetts" in Freeman vs. Premier Contempt Proceedings "Defendant's Amended Answer to Plaintiff's Order to Show Cause Why Defendant Should Not Be Adjudged in Contempt" with drawing attached.

[fol. 825] Exhibit A-1 to A-23. Photostatic copies of series of license agreements entered into between Plaintiffs and various licensees. (132 sheets)

That, to reproduce the aforesaid paper exhibits in the printed record, would add at least about 1000 pages to the record.

That, in the presentation of the above entitled cause to this Court, the aforesaid documentary exhibits will probably be referred to only by way of evidencing the physical character of the documents themselves; and, if any portion of the text of any of the aforesaid documentary exhibits is referred to by either side in the presentation of this matter, such reference to the text will constitute such a small part of the whole text that it would be extravagant to reproduce the documents in their entirety.

Wherefore, it is prayed that an Order be entered pursuant to the privileges of Section 10, Rule 25, dispensing with the printing of the aforesaid exhibits.

**BENJAMIN W. FREEMAN and
THE LOUIS G. FREEMAN COMPANY,**
Appellants,

By **JOHN H. SUTHERLAND,**
Attorney for Appellants,
1004 Market Street,
St. Louis, Missouri.

We assent to the entry of the Order as herein above prayed for by Appellants.

KINGSLAND, ROGERS & EZELL,
Attorneys for Appellees,
705 Olive Street,
St. Louis, Missouri.

(Endorsed): No. 12,241. Application for an Order Dispensing with printing of certain Documentary Exhibits. Filed in U. S. Circuit Court of Appeals on March 4, 1942.

[fol. 826] (Order directing that certain original exhibits may be omitted from the printed record, etc.)

United States Circuit Court of Appeals
For the Eighth Circuit

March Term, 1942. Tuesday, March 10, 1942.

Benjamin W. Freeman and The Louis
G. Freeman Company,

Appellants,

vs.

A. W. Altvater and The Western Sup-
plies Company,

Appellees.

No. 12,241

Upon application of Appellants, assented to by Appellees, it is hereby ordered that Exhibits 20, 21, 22, 23, 24,

28, 33A, 33B, 33C, 37, 38, 42, L, M, N, A-1 to A-23 inclusive, the originals of all of which have been certified to this Court as physical exhibits, be treated as physical exhibits in this Court and that reproduction thereof for the printed record in this Court be dispensed with.

March 10, 1942.

[fol. 827] (Order that copies of the photo stat exhibits and letters patents be inserted in only fourteen copies of the printed record.)

United States Circuit Court of Appeals
Eighth Circuit.

No. 12,241. March Term, 1942.

{ Tuesday, March 10, 1942.

Benjamin W. Freeman and
The Louis G. Freeman
Company,

Appellants.

vs.

A. W. Altvater and The
Western Supplies Company,
Appellees.

} Appeal from the District
Court of the United
States for the Eastern
District of Missouri.

Stipulation of parties that only fourteen copies of the necessary documentary exhibits be reproduced for insertion in that number of copies of the printed record, ten for the use of the Court and two for use of counsel for appellant and two for use of counsel for appellee, in lieu of completing thirty copies of the printed record by inserting copies of the necessary exhibits, be, and is hereby, approved by this Court.

March 10, 1942

[fol. 942] (Appearance of Counsel for Appellants)

UNITED STATES CIRCUIT COURT OF APPEALS, EIGHTH CIRCUIT

No. 12241

BENJAMIN W. FREEMAN and THE LOUIS G. FREEMAN
COMPANY, Appellants,

vs.

A. W. ALTVATER and THE WESTERN SUPPLIES COMPANY

The Clerk will enter my appearance as Counsel for the
Appellants.

Marston Allen, Theodore Greve, John H. Sutherland.

[Endorsed:] Filed in U. S. Circuit Court of Appeals,
Feb. 23, 1942.

(Appearance of Counsel for Appellees)

The Clerk will enter my appearance as Counsel for the
Appellees.

Lawrence C. Kingsland, Edmund C. Rogers, Estill
E. Ezell, 705 Olive Street, St. Louis.

[Endorsed:] Filed in U. S. Circuit Court of Appeals,
Apr. 10, 1942.

[fol. 943] (Order of Submission)

May Term, 1942

Monday, May 11, 1942.

This cause having been called for hearing in its regular
order, argument was commenced by Mr. Marston Allen for
appellants, continued by Mr. Edmund C. Rogers and Mr.
Lawrence C. Kingsland for appellees, and concluded by Mr.
John H. Sutherland for appellants.

Thereupon, this cause was submitted to the Court on the
transcript of the record from said District Court and the
briefs of counsel filed herein.

[fol. 944]

(Opinion)

UNITED STATES CIRCUIT COURT OF APPEALS, EIGHTH CIRCUIT,
MAY TERM, A. D. 1942

No. 12,241

BENJAMIN W. FREEMAN, et al., Appellants,

vs.

A. W. ALTVATER, et al., Appellees

Appeal from the District Court of the United States for
the Eastern District of Missouri

(July 15, 1942)

Mr. Marston Allen and Mr. John H. Sutherland (Messrs. Allen & Allen, Messrs. Bruninga & Sutherland were with him on the brief) for Appellants.

Mr. Edmund C. Rogers and Mr. Lawrence C. Kingsland (Mr. Estill E. Ezell, and Messrs. Kingsland, Rogers & Ezell were with them on the brief) for Appellees.

Before Gardner, Woodrough and Johnsen, Circuit Judges

GARDNER, Circuit Judge, delivered the opinion of the court:

This was a suit brought by appellants as plaintiffs against appellees, seeking specific enforcement of a license agree-[fol. 945] ment under reissue United States patent No. 20,202, issued to Benjamin W. Freeman December 8, 1936, upon an application filed October 30, 1936, for a cut-out machine for shoe uppers, and to enjoin defendants from making and selling flat bed dies and masks, more particularly the so-called clamp gauge dies and elevated gauge dies. An accounting was also sought. The parties will be referred to as they appeared in the trial court.

By supplemental bill plaintiffs alleged that since the filing of their original bill the subject matter of the suit became covered by reissue patent 20,202, issued on the surrender of its patent No. 1,681,033, and that the reissue patent had been submitted to defendants and accepted by them as a substitute for the original patent No. 1,681,033. Defendants denied the validity of the reissue patent, denied

that they had accepted it as a substitute for the original patent, denied that the accused dies manufactured by them infringed the reissue patent, pleaded that by disclaimer plaintiffs have been evicted from the monopoly granted by their original patent, thus terminating the contract between plaintiffs and defendants. They pleaded affirmatively that plaintiff Benjamin W. Freeman filed a suit in the United States District Court for the District of Massachusetts, against Premier Machine Company, alleging infringement of twenty-six claims of plaintiffs' original patent; that such proceedings were had in said suit that the United States Circuit Court of Appeals for the First Circuit adjudged that twenty-three of the twenty-six claims, including claims 13 and 17 herein sued upon, were held invalid, and that three claims, 18, 70 and 81, were held valid but restricted to certain limited scope; that following the decision in *Premier Machine Co. v. Freeman*, (84 F. 2d 425), and by reason thereof, plaintiff Benjamin W. Freeman filed a disclaimer in the United States Patent Office. By amendment [fol. 946] during the trial, defendants pleaded that the leases and licenses of plaintiffs were an attempt to monopolize unpatented dies and machines, thus precluding them from maintaining this suit because of their unclean hands.

On the trial on the issue of specific performance, plaintiffs limited their charges to the complaint that defendants had sold certain flat bed dies coming within claim 6 of the reissue patent. The court made elaborate and detailed findings of fact and conclusions of law, finding, among other things, that the accused devices consisting of certain flat bed cutting dies for use in forming decorative patterns in shoe upper material, did not infringe plaintiffs' reissue patent; that the decision in the Premier case evicted Freeman from any claim to a patent monopoly on a machine and any claim to a monopoly on the so-called anvil type of die holder, and that the reissue patent was devoid of patentable subject matter; that the decision limited claim 6 to a clamping mask and die with a window shaped to correspond to the outline of the stitched pattern of the perforations to be made, or corresponding in size and shape to the pattern of the decoration to be perforated, and that the mere use of a window in a clamping plate was not invention, nor was the use of a straight or curved edge on a clamp for gauging purposes invention; that plaintiffs had entered into license and lease agreements involving the

patent in suit, which attempted to monopolize and limit competition in unpatented dies and masks, and that such contracts were in existence at the time of the trial; that the original contract between the parties to this litigation was based upon the original Freeman patent No. 1,681,033; that said patent was surrendered and expired December 8, 1936, thus terminating the original contract; that defendants, since the date of reissue have paid certain royalties upon the original patent; that they are under an [fol. 947] injunction in the first *Freeman v. Altvater* suit to pay such royalties, but that they protested payment in correspondence with plaintiffs and by numerous legal actions, so that they have not indicated any acceptance of the reissue to form a new contract; that Freeman's disclaimer of all claims held invalid in the Premier suit constituted an abandonment of the subject matter of such claims and he had retained claims not definitely distinguishable from the claims held invalid; that the reissue did not accord with the findings of the court in the Premier case, but were in disregard of the disclaimer.

Based on its findings and conclusions, the court adjudged that the accused devices did not infringe the reissue patent; that the license contract between the parties was terminated December 8, 1936, the date of the reissue patent, and that since that time no new contract had been entered into; that Freeman was evicted from the monopoly of his patent by the decision in *Premier Co. v. Freeman*; that the original patent became invalid upon Freeman's disclaimer; that the complaint and supplemental complaint be dismissed. Other facts will appear in the course of the opinion.

On appeal plaintiffs seek reversal on substantially the following grounds: (1) the acts of defendants were such as to revive the contract in suit as of December, 1936, after the reissue patent was tendered by plaintiffs to defendants; (2) defendants, being licensees, can not attack the validity of the patents under which they are licensed; (3) in considering infringement by the licensees operating under the protection of the patent, the construction of the patent claims should be generous in order to result in the licensor being recompensed for what he has given up; (4) the reissue patent is valid; (5) the doctrine of unclean hands is not applicable to plaintiffs.

Plaintiffs brought a similar suit against defendants in 1930, asking specific performance of a contract, an injunction [fol. 948] against infringement, and an accounting. The trial court denied relief and on appeal we reversed. *Freeman v. Altvater*. 66 F. 2d 506. Freeman's original patent No. 1,681,033, issued April 14, 1928, covered a cut-out machine for shoe uppers. In January, 1929, plaintiffs entered into a license contract with the defendants, which granted defendants the right to make and sell within a designated territory, upon payment of royalties, parts known as dies, anvils and masks of the patented machine and permitted them to repair but not to rebuild the machines they had already sold. Within a few days after entering into the license contract, the defendant Altvater placed upon the market a machine known as the "Model T," for which he was granted patent No. 1,807,952 on June 2, 1931, his application being dated January 25, 1929. This court held that defendant Altvater's Model T machine infringed plaintiffs' patented device. *Freeman v. Altvater, supra*. In that case it was said that, "The important question in this case is whether the Model T machine infringes the Freeman patent. The validity of the patent is not in question since the defendants, being licensees, are estopped to assert its invalidity." The dies now accused as infringing plaintiffs' patent were not before the court in the prior suit. In the accounting ordered in that suit, plaintiffs presented to the special master these flat bed dies, claiming that they came within the decree. The master, however, held that they were not covered by the decree and consequently plaintiffs brought this suit. In the meantime, the Premier case was decided, resulting in a finding that many of the claims of the original Freeman patent were void. Plaintiffs then disclaimed as to the claims so adjudicated to be void and secured the reissue patent No. 20,202. Plaintiffs then wrote to defendants as their licensees under the prior patent, as follows:

[fol. 949]

"December 9, 1936.

Western Supplies Company, 2920 Cass Avenue, St. Louis,
Missouri.

GENTLEMEN:

We herewith enclose copy of Reissue Letters Patent No. RE. 20,202 and No. RE. 20,203. These, as you will note,

are divisions of patent No. 1,681,033, which forms the basis of your license agreement.

RE. 20,202 relates to dies with masks only, and RE. 20,203, states the invention of the anvil die as a part of a method of shoemaking, which was indicated as the nature of this invention in a recent court decision. A sale of an anvil die without a mask by you will carry with it the right to use it according to this method.

As we view the matter, the patent situation under which you are licensed is improved by this change and applies to the same dies, and this letter is to advise you that your license will apply in the future to these Reissue patents instead of the one recited in the license.

Yours truly, The Louis G. Freeman Company, Benj. W. Freeman."

To this letter defendants made no immediate reply but they continued to send reports of dies sold under the contract and paid the royalties due on the same basis as before and as required by the injunctive order in the original suit. In February, 1937, they requested a conference, due, they said, to complications arising from the result of the Premier Machine Company suit and the reissues. Plaintiffs delayed reply to this letter for one month. Then counsel for plaintiff wrote counsel for defendants, asking [fol. 950] them to come to Cincinnati for conference and stating that further steps in the accounting proceeding had been postponed pending the proposed conference. At that conference Altvater stated that defendants regarded the reissue patents invalid. Defendants then brought a suit against plaintiffs in the Federal Court for the Southern District of Ohio for a declaratory judgment, alleging the invalidity of the reissue patents; that Freeman's surrender of the original patent terminated the contract between the parties; that the reissue patent contained claims not distinguishable from the die claims declared invalid in the Premier case. The court, holding that no justiciable controversy existed and that the District Court of Missouri had jurisdiction of whatever controversy did exist, dismissed the bill, whereupon the case was taken to the Circuit Court of Appeals and the dismissal sustained. *Western Supplies Co. v. Freeman*, 6 Cir., 109 F. 2d 693.

It is urged that the letter written by plaintiffs to defendants was an offer to enter into a new contractual rela-

tionship, modifying the old contract by substituting the reissue patents for the former patent and that payment and reports in apparent compliance with this offer constituted an acceptance. Plaintiffs concede that "upon the decision of the Premier case defendants had a right to cancel the contract." This concession makes it unnecessary to consider the claim of the defendants that plaintiffs were evicted from the monopoly of their patent by the Premier decision, and that in consequence of that eviction the field previously protected by the monopoly of the patent became wide open, and hence, the consideration upon which their contract with defendants rested failed. *Ross v. Fuller & Warren Co.*, C. C., 105 F. 510; *Drackett Chemical Co. v. Chamberlain Co.*, 6 Cir., 63 F. 2d 853; *H. C. White Co. v. Morton E. Converse & Sons Co.*, 2 Cir., 20 F. 2d 311.

[fol. 951] The burden of proof as to the existence of the alleged new contract was upon plaintiffs. The above quoted letter is relied upon as an offer. It should be observed that the letter first advises defendants that copy of the reissue letters patent are enclosed. The second paragraph makes some explanation with reference to the reissue patent, explaining why the reissue was divided into two patents, whereas the original was but one patent. It is then stated, presumably as an opinion, that, "A sale of an anvil die without a mask by you will carry with it the right to use it according to this method." It is then suggested, which suggestion we assume is also an opinion, that, "the patent situation under which you are licensed is improved by this change." Then follow the only words that could be construed as an offer: "this letter is to advise you that your license will apply in the future to these reissue patents, instead of the one recited in the license." This does not purport to be an offer. It purports to be a statement either of fact, of law, or of opinion. It calls for no answer, nor does it call for any act of acceptance; it calls for no new consideration. It is claimed that the payment of royalties was a performance or part performance, but as the royalties had habitually been paid under the old contract and pursuant to the injunctional order, and the offer in itself called for no payments of royalties, it can not be said that the performance was induced by this alleged proposal or offer, nor in fulfillment of any requirement contained therein. To be an acceptance it must have been in-

duced by the proposal. *Schmitt v. Weil, Ind.*, 92 N. E. 178. The trial court found affirmatively that the royalty payments did not indicate an acceptance of the reissue to form a new contract, but that they were paid by the defendants under the original patent and under the injunction. If they were so made, even though defendants may have been in error as to the necessity for so doing, the payments would [fol. 952] not indicate a meeting of the minds of the parties as to the proposed new contract. There are attending circumstances tending, we think, to corroborate the contention of defendants in this regard. As has been observed, defendants wrote plaintiffs, suggesting the desirability or necessity of a conference because of the decision in the Premier case and the subsequent disclaimer by plaintiffs. Plaintiffs, with knowledge that this was the contention of defendants, agreed to the conference. At that conference defendants took the position that the reissue patents were invalid. They followed this up with a suit brought against plaintiffs, setting up the reissue patents and claiming their invalidity. Following this they filed in the original suit petition for leave to file a bill in the nature of bill of review in which they alleged the invalidity of the reissue patents and that the entire decree in the original suit should be set aside. These acts were all consistent with the theory that defendants had not accepted the alleged proposal of plaintiffs, but quite inconsistent with the theory of acceptance. We think the finding of the trial court on this phase of the case is supported by substantial evidence, and we accept it as the ultimate facts binding on us on this appeal.

We put aside as unnecessary for decision the contention of defendants, which the trial court sustained, that plaintiffs have entered into license and lease agreements involving the patent in suit, which attempt to monopolize and limit competition in unpatented dies and machines and that such contracts were in existence at the time this suit was tried, except as such provision may be contained in the proposed new contract. It is noted that in the letter of December 9, 1936, this attempt is renewed by the recital that, "A sale of an anvil die without a mask by you will carry with it the right to use it according to this method," and that, "the [fol. 953] patent situation under which you are licensed is improved by this change and applies to the same dies." But according to the Premier decision, the anvil dies were not protected by the patent, yet this so-called offer sought

an agreement that would secure a limited monopoly in unpatented anvil dies. Such a contract is violative of the public policy and would not be entitled to specific enforcement by a court of equity. *Morton Salt Co. v. Suppiger Co.*, 314 U. S. 488; *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U. S. 502; *Carbice Corp. v. American Patents Development Corp.*, 233 U. S. 27; *Leitch Mfg. Co. v. Barber Co.*, 302 U. S. 458; *B. B. Chemical Co. v. Ellis*, 314 U. S. 495.

The specific enforcement of a contract by a court of equity is not a matter of absolute right, but is a matter of grace resting within the sound discretion of the court. *Pope Mfg. Co. v. Gormully*, 144 U. S. 224; *Hennessey v. Woolworth*, 128 U. S. 438; *Oklahoma Natural Gas Corp. v. Municipal Gas Co.*, 10 Cir., 38 F. 2d 444. If a contract is detrimental to the public, even though not illegal, a court of equity may properly decline to enforce it. *Seaboard Air Line Ry. Co. v. Atlantic, etc. R. Co.*, 5 Cir., 35 F. 2d 609.

Even if the defendants might be held to be licensees under the alleged modified contract, they may still contend that the reissue patents, as limited by the prior art, do not cover their flat bed dies. Plaintiffs complain that the trial court put aside the plain scope and effect of the decision of this court "because the decision was entitled in a cause between the same parties on the same contract and involved consideration of the same inventive concepts by this very court upon comparison with the same prior art." Plaintiffs are not in position to claim advantage of the doctrine of *res judicata*. If the alleged infringement by the dies accused in this case was in fact a part of plaintiffs' original cause of action and they simply failed to make proof ad-[fol. 954] missible under their pleadings, this would constitute a splitting of their cause of action and the judgment obtained would preclude them from maintaining a second suit for the residue of their claim, even though the second suit might not be identical with the first. *Deweese v. Smith*, 8 Cir., 106 F. 438. This principle would preclude plaintiffs not only as to the issues actually determined, but also as to every other matter which might have been litigated in the case. We assume, therefore, that plaintiffs concede that their present cause of action was not a part of nor included in the former case between the same parties decided by this court. The conclusiveness of the judgment

in that case can, therefore, operate as an estoppel only as to the points or questions actually litigated and determined, and not as to matters not litigated, even though such matters might properly have been determined. *Larsen v. Northland Transportation Co.*, 292 U. S. 20; *Radford v. Myers*, 231 U. S. 725; *Water, Light & Gas Co. v. Hutchinson*, 8 Cir., 160 F. 41; *Harrison v. Remington Paper Co.*, 8 Cir., 140 F. 385.

The offending dies are shown in the record as Exhibits 1 and 2 and are called respectively a "clamp gauge die," and an "elevated gauge die." They are flat bed dies in which the work support is not so limited in size or shape that the work can be draped over it. These dies are said to infringe because of mask plates which overlies the upper after it is placed over the dies which have shaped openings so as to gauge the position of the upper with reference to the die. With the shoe upper which is to be used with the particular die before him, the workman makes up the masks for such die by selecting some part of the work which will be exposed by the mask, and shaping the edges of the mask hole to correspond. Each mask is specially made for some one particular pattern of shoe upper. In order to locate [fol. 955] an upper on these two accused dies, it is placed upon the stripper plate and moved until the stitching marks painted on it coincide with the edges surrounding the opening in the mask plate of Exhibit 1, or until the edges of the applied strips coincide with the edges surrounding the mask opening in Exhibit 2. When this has been done, the work is gauged or located with reference to the cutting edges of the die. When placed beneath a plunger which comes down over the masks, the upper and stripper plate are forced down over the die and the holes are cut in the work by the cutters of the die. Claim 6 of reissue patent No. 20,202, identical with claim 18 of the original patent, which is the only claim of the patent here involved, reads as follows:

"6. In combination with a cutting die having cutting edges for cutting designs in shoe upper material, a support for the die and a mask cooperating therewith, said mask being provided with one or more edge portions to partially surround the cutting edges of the die, said edges or edge portions shaped to act as a gauge for the position of the material beneath the mask."

Referring to the prior art, which we may do for the purpose of construing the claims of the patent, conceding the patent's validity, it is observed that Knight (783,403 and 1,448,751), Kemp (573,274), Cotton (320,228) and Lautenschlager (1,434,060), had disclosed a cutting die for cutting designs in shoe uppers, a support for the die, a mask with one or more edge portions to surround the cutting edges and with the edge or edge portions shaped to act as a gauge for positioning the material beneath the mask. The trial court so found. In our prior opinion we did not specifically consider claim 18 of the original patent. The Circuit Court of Appeals of the First Circuit, in *Premier Co. v. Freeman*, *supra*, held that there was invention in a mask having a fixed relation to the die with a window similar to the pattern to be perforated so placed with relation to the pattern and the die as to be used as a gauge, but it did not specifically consider this with relation to the prior art. No reason appears why the trial court's findings should be disturbed on this issue. While a licensee under a patent may not refer to the prior art for the purpose of showing that the patent is anticipated and hence invalid, he may, nevertheless, do so for the purpose of showing that he does not infringe the patent. *Pressed Steel Car Co. v. Union Pacific R. Co.*, 2 Cir., 270 F. 518.

Claim 6 discloses invention only in that the edge of the window acts as a gauge corresponding to a part of the shoe design. Read in the light of the specifications, this gauge must fix the position of the upper without previously marking or forming any pattern on the work. The claims of a patent are to be read and interpreted in the light of its specifications. *Schriber-Schroth Co. v. Cleveland Trust Co.*, 311 U.S. 211. Kemp discloses a mechanism for perforating shoe tips or shoe caps. He employs clamps, with openings that completely surround the part of the shoe tip to be perforated. Cotton shows a device for cutting heel blanks from leather pieces. His clamping members include two portions, B and C, the latter of which is hinged to the former. Both have corresponding openings which are "in the shape of the die which cuts the blanks but a trifle larger so that it will fit over the edge of the die." These members "press upon the leather." Cotton's mask edges are designed to outline the shape of the cut-out, so that they perform a certain gauging function. Lautenschlager, in his application, states that his invention relates to perforat-

ing machines, "and more particularly to a machine of that class in which a die carrying plunger is employed for perforating a complete pattern or design upon each opera- [fol. 957] tion." In figure 12 of his patent drawings, a gauge is shown elevated above the work support so that the vamp may be inserted thereunder. The gauge has an edge that has a curvature concentric with the curvature of the perforations to be made. The vamp has been previously marked with pin points that are brought against lines on the gauge. Knight has gauging plates with curved edges against which some part of the upper may be gauged, either by a row of stitchings or marks.

Exhibit 1, which is defendants' presently used device, follows the prior art, rather than Freeman, because to use it the work must be previously marked with an ink-line, and then be slipped over the stripper plate, and beneath the gauge, the marks having been brought against the curved back edge of the gauge. Knight partially encloses the work. That is why it is necessary that Freeman's window must entirely surround the work to constitute invention. Exhibit 1 does not completely surround the work. There is testimony to show that in some size uppers, the side fingers of Exhibit 1 do not grasp the work at all. Invention or infringement on the part of defendants will not be decided on the narrow issue of degree. *Guidet v. Brooklyn*, 105 U.S. 550. This applies to other differences between Knight and Exhibit 1. All are differences of degree. Defendants have shown fidelity to Knight. In so far as their devices differ from the prior art, plaintiffs have not shown that their reissue patent No. 20,202 was copied.

Exhibit 2 is an elevated gauge die. The upper plate is maintained a fixed distance above the stripper plate. The gauging is not done without the presence of a suitable mark used in connection with the small hole having an edge on the center line of the plate and through which the front part of the toe cap is visible. It is necessary in using it to [fol. 958] apply a mark, which Freeman said in his specifications he avoided. There is no mask, no clamping function, and no window completely surrounding the work. Any difference between Exhibit 2 and Knight is again one of degree.

The evidence shows that defendants have not copied plaintiffs' patent so far as it may show patentability, but

have availed themselves of the benefits of the prior art. We conclude that the court's finding of non-infringement can not be set aside as clearly erroneous. The accused devices do not accomplish their work in substantially the same way as the Freeman invention, and there is, therefore, no infringement of claim 6 of the Freeman reissue patent.

In view of the conclusions already reached, we pretermit consideration of the other contentions urged by appellants as unnecessary in the decision of this case.

The decree appealed from is therefore *affirmed*.

[fol. 959]

(Judgment)

UNITED STATES CIRCUIT COURT OF APPEALS, EIGHTH CIRCUIT,
MAY TERM, 1942

No. 12241

BENJAMIN W. FREEMAN and THE LOUIS G. FREEMAN COM-
PANY, Appellants,

vs.

A. W. ALTVATER and THE WESTERN SUPPLIES COMPANY

Wednesday, July 15, 1942.

Appeal from the District Court of the United States for the Eastern District of Missouri.

This cause came on to be heard on the transcript of the record from the District Court of the United States for the Eastern District of Missouri, and was argued by counsel.

On Consideration Whereof, it is now here ordered and adjudged by this Court, that the judgment of the said District Court, in this cause, be, and the same is hereby, affirmed with costs; and that A. W. Altvater and The Western Supplies Company have and recover against Benjamin W. Freeman and The Louis G. Freeman Company the sum of Twenty Dollars for their costs herein and have execution therefor.

July 15, 1942.

UNITED STATES CIRCUIT COURT OF APPEALS
EIGHTH CIRCUIT

No. 12,241

BENJAMIN W. FREEMAN et al.,

Appellants,

v.

A. W. ALTVATER et al.,

Appellees.

PETITION FOR REHEARING

Now come the Appellants and petition this Honorable Court for a rehearing in the aforementioned cause on the following ground:

That this Court of Appeals by affirmance generally of the decree below, thereby affirmed certain rulings in said decree, whereas in the body of its opinion, this Court of Appeals ruled that consideration of these rulings were unnecessary to the determination of the cause.

Wherefore, appellants wish to maintain upon rehearing that the Court should send the cause back to the District

Court with instructions to modify its decree in this cause in accordance with the opinion of this Court, so as to include sections 1, 2, 4 and 6 of the decree, but omitting sections 3 and 5 thereof. In the alternative it is our prayer that the instruction to the District Court be to modify its decree by omitting section 3 thereof and modify section 5 thereof so as to dismiss the counterclaim except as it is otherwise granted in the decree as modified.

ARGUMENT

The decree of the District Court appears on pages 89 and 90 of the record. In this decree sections 1 and 2 are the following:

"1. Exhibits 1, 2, 3A, 4 and 5 do not infringe Re-issue Patent No. 20,202.

"2. The original contract of January 1, 1929, between the parties hereto, was terminated as of December 8, 1936, the date of the reissue patents. Since that time no new contract has been entered into."

Section 3 of the decree relates to eviction, invalidity of patent 1,680,133, and invalidity of the two reissue patents resulting therefrom. *None of this was passed on by this Court.* It reads as follows:

"3. Freeman was evicted from any monopoly on a machine on the date of the decision in *Freeman v. Premier Machine Co.*, June 5, 1936. On that same date he was evicted from claiming any scope for a mask die beyond that set forth in the Findings of Fact herein filed. On the date of his disclaimer, November 11, 1936, these facts became fixed and unchangeable by the filing of the disclaimer. The original Freeman patent No. 1,681,033, became invalid November 11, 1936. The reissue patents 20,202 and 20,203 are invalid."

Section 4 of the decree accords with the opinion of this Court. It reads as follows:

"4. The bill of complaint and the supplement thereto are hereby dismissed."

Section 5 of the decree relates to the defendant's counterclaim solely. *The counterclaim was not mentioned in this Court's opinion.* It reads as follows:

"5. The issues on the counterclaim are found in favor of defendants and the counterclaim is granted as herein set forth."

Section 6 awards costs to the defendants.

The decision of this Court, while it finds that determination of certain issues such as were raised in the answer and also the counterclaim (so-called) of the defendants, was not necessary to the determination of the cause, proceeds to affirm the decree below in general terms. Since the District Court decree contains holdings in sections 3 and 5, which were held to be unnecessary conclusions by this Court, nevertheless the decree we fear may be contended to have been affirmed in these very points which this Court expressly did not decide, if this Court's mandate is one of general affirmance.

The effect of general affirmance of the decree would be no doubt contended to be a finding by this Court of Appeals that both of the reissue patents of Freeman are invalid. Such a finding would do Freeman much harm, and upon the issues involved in the present suit, do the defendants no good. Freeman has a large number of licensees throughout the country, and a finding of invalidity would thus damage him greatly. This Court has found that the dies made by defendants as charged in the Bill of Complaint are not infringements, and hence whether the reissue patents are valid or invalid, has no bearing on the controversy made by the bill. Also the Court has

found that there is no specifically enforceable contract between the parties which removes the necessity of investigating the value of the consideration therefor.

PROCEDURE

It may be urged that petition for rehearing is not the appropriate name for the present pleading. However, the Clerk's Office has entered a decree which is simply one of general affirmance. Wherefore, even though the mandate of this Court has not been stated in so many words, its decree has been formulated as of July 15, 1942, and we employ the remedy of petition for rehearing in order to bring the matter to the attention of the Court. No doubt this Court will accept this petition as one requesting a modification of its decree or a suggestion as to the mandate.

AUTHORITIES

While we do not find that this Court has been presented with the problem, it has come about recently in several Circuits, that decrees of a District Court finding non-infringement and also passing upon validity have been ruled upon by Courts of Appeals, which have held that there was no infringement and hence that the finding of invalidity by the District Court was uncalled for.

The matter has been handled in various ways, somewhat dependent upon the wording of the District Court decree.

In *Electrical Fittings Corp. v. Thomas and Betts Co.*, 307 U. S. 241, the Supreme Court entertained an appeal for the purpose of correcting a District Court decision which had found non-infringement, but that the claim sued on was valid. The order of the Court was that since the patent was not infringed there should have been no holding of validity, since it was unnecessary. The Court of Appeals was directed to send the case back to the Dis-

trict Court to correct its decree by omitting the holding of validity.

In *Richard Irvin Co. v. Westinghouse Air Brake Co. et al.*, 121 Fed. (2d) 429, the Court of Appeals for the Second Circuit had before it a District Court decree, finding a patent invalid and not infringed. On the ground that the finding of invalidity was unnecessary the Court of Appeals *reversed* the decree below as to validity and *affirmed* it as to infringement.

In *L. McBrine Co., Ltd. v. Silverman et al.*, 121 Fed. 181, where patent had been held not infringed and invalid, the Court of Appeals affirmed the decree below with an order to the District Court to eliminate from its decree the finding of invalidity.

In *Clapp v. Stewart Warner Corp.*, 116 Fed. (2d) 68, where again a patent was held invalid and not infringed, the Court affirmed the decree below stating in its opinion that it was not considering the matter of validity, giving the patentee the benefit of the presumptive validity of his patent. But in this case the decree below, which was affirmed, simply dismissed the Bill of Complaint for want of equity and the finding of invalidity of the patent did not appear in the decree.

In the present matter we have a decree which does in fact make specific holdings as to matters which are not considered necessary by this Court for decision. Therefore, on the above authorities, it would appear to be the sound practice to direct the District Court to modify its decree omitting paragraphs 3 and 5 thereof.

Since the counterclaim was sustained only in so far as the decree sustained it otherwise, it is not believed that this Court need be concerned with its particular wording or prayers. However, the sustaining of it was set up as error, and it did ask for a positive finding of invalidity of the reissues.

There was mention of the counterclaim as such in the briefs and it was contended by plaintiff (appellants) that there was no justiciable controversy on validity of the reissue patents, because suit for infringement by Freeman against Altvater of any kind or nature, had been prevented by the act of Altvater in continuing to pay royalties. This Court has now found another reason why there is no justiciable controversy insofar as the dies involved in the present litigation are concerned, namely, that they are not infringements. Whether or not there was a specifically enforceable contract between the parties (this Court having found that there was not), there had certainly grown up out of the confused relationship a situation wherein immunity from patent suit was kept up and maintained by the defendants. This immunity lasted until the District Court found invalidity, and as stated to this Court upon oral argument, the payment of royalties then ceased at once, i. e., because the patents were held invalid, not because of the old injunction.

It should be noted that the dies on which royalty has been paid up to the date of the District Court decree are ones which in the opinion of this Court fall within reissue 20,202. Thus, while this Court makes some comment on the legal status of anvil dies without masks upon them in its opinion, there was never any such die made or reported to Freeman by the defendants, and the flat bed dies with masks upon them reported by defendants all of these years, and paid for, were surely not the dies which were in contest in this case, but again had mask plates with fully closed holes in them, shaped to conform to the work. Thus it is that plaintiff's concern is with reference to the effect of a mandate of general affirmance depriving plaintiffs of their rights in dies with masks which this Court construed to be within their patent rights.

The payment of royalty by defendants was *not* because of the pendency of an injunction in the old suit as witness the fact that they stopped paying royalty the moment the patent No. 20,202 was held to be invalid by the District Court decree, *although the injunction in the original suit is still running against defendants to the present date.*

Whatever the case may be, and while admittedly the facts last above noted were not in the present record because they occurred after the decree from which appeal was made, it is deemed to be apparent that the defendants had no justiciable contest as to validity of the reissue No. 20,202 of the plaintiffs in the present case. Thus there is properly an issue to be determined between the parties upon full hearing in a separate suit, to wit, whether or not the defendants' are now infringing upon the valid claims of plaintiffs' patents in respects other than were brought before the Court in the present branch of the controversy, which suit could not have been brought by the plaintiff up to this date.

We fear that if this Court does not remand with instructions to modify the decree by omission of the sections noted, that it will be contended that Freeman has no rights whatever in either of his reissues, a matter which this Court has not determined, and which was very sketchily dealt with in the record on purely technical grounds, but which is concluded in the decree as entered below.

THE ALTERNATIVE RELIEF PRAYED FOR

The answer of defendants, pp. 40-49 of the record, includes twenty-four numbered paragraphs of which the last six are indicated as a counterclaim. The counterclaim is essentially directed to the idea that if the reissue patents of Freeman are held by the Court to be valid, and defendants bound to respect them (which defendants say they

should not be), then that the Court construe the contract so as to take care of the situation created by the reissues.

There are six prayers by defendants appended to the answer and counterclaim. Prayers I, II and III ask that the license contract be interpreted or specifically held to have been terminated as of the reissue date. Prayer IV asks that the reissue patents be held invalid. Prayer V asks that if the reissues are valid the Court set out license terms which are fair and commensurate with their scope. And Prayer VI asks the Court to declare the injunction in the former suit at an end or define its limits anew.

As we view section 5 of the District Court decree, it sustains the counterclaim, granting it only "as herein set forth," i. e., to the extent granted in other portions of the decree. This means no more than that sections 1 through 4 of the decree to the extent that they respond to the prayers of the counterclaim, be taken as a grant thereof.

Now the decree "interpreted" the contract and patents by finding that Exs. 1, 2, 3A, 4 and 5 did not infringe Reissue 20,202. It sustained the Prayers I to III of the counterclaim further by finding the contract to have been brought to an end. Prayer V then became unnecessary to determine and Prayer VI was obviously improper without previous consent of this Court.

In section 3 of the decree, eviction, estoppel by disclaimer and invalidity of the reissue patents were found. This was a grant of Prayer IV of the counterclaim.

We now ask that section 3 of the decree be ordered stricken therefrom. To this extent then the counterclaim is not sustained.

But the bill and answer also presented the issues concluded in sections 1, 2, 3 and 4 of the decree. Thus the decree, not mentioning the counterclaim at all, which would be the case if our first alternative be followed, might

be held to be one which did not pass upon the counterclaim, leaving it pending. Nevertheless, sections 1 and 2 of the decree do adjudicate whatever there was to the counterclaim except the matter of validity of the reissue patents, which this Court found unnecessary to a conclusion of the issues.

The solution of the problem as it suggested itself to petitioner was simply to eliminate the passages of the decree which this Court found expressly to be unnecessary to the determination of the issue. Thus the amended decree would only sustain the counterclaim by interpreting the patents and finding the contract at an end.

The alternative solution would be for this Court to direct the District Court to dismiss the counterclaim except as sustained in the body of the decree. The reasons for so ordering the District Court are the following:

1. The counterclaim is essentially one which prays for construction of the original contract. Since the contract is ended, there is nothing to construe and on this score it should be dismissed.

2. Insofar as it prays for a finding of invalidity of the reissue patents—this was also set up as a *defense* in the answer, and this Court found it unnecessary to rule upon it wherefore it should not be in the decree on the authority of 307 U. S. 241 (*supra*) and the other cases also in this petition.

3. So far as the counterclaim concerns the issue of patent validity, the issue was not a proper one to be considered anyhow. The reason for this is, as we have noted, that no patent infringement suit faced the defendants on the reissues because they were maintaining a right not to be sued by paying royalties thus binding Freeman to the contract as modified by the December 1936 letter. Whatever may have been the position of defendants, or the

nature of the Freeman tender of his reissues in place of the original patent, Freeman was surely bound by his tender, because he stated that the contract applied to the reissues instead of the original contract and in response defendants kept on paying royalties.

Whether or not the defendants were bound by the provisions of the original contract with the reissues substituted, Freeman was so bound. The phenomenon of one party being bound to a patent license contract and the other bound only as a licensee "without portfolio" is the effect of the decision of this Court as we view it.

Defendants were surely protected by an immunity from suit under the reissue patent 20,202 which was the only one they were infringing. This Court found the clamp gauge and elevated gauge dies not to be infringements, and found that dies having fully closed holes in the masks to be within the patents. By keeping up royalties defendants maintained immunity from patent suit against them for producing and selling the latter dies. They were thus licensees, because in its simplest legal form a license under a patent means freedom from suit thereunder. As licensees they could not hold their position and yet attack the validity of the patents, and in a Declaratory Judgment action, which is the effect of the counterclaim, they could not maintain an action for testing validity, because they were not threatened with an infringement suit.

Our present point is that there was no "justiciable" controversy between the parties involving the validity of the Freeman reissue patents. And, of course, this Court having found non-infringement, and stated that it was not necessary to consider validity on the issues raised by the Bill and Answer, would in the ordinary course, as indicated in the above cited authorities, instruct the District Court to modify its decree.

Since the holding that the contract no longer exists decides most of the prayers of the counterclaim, and the validity of the patents was not a present or justiciable controversy during the entire pendency of the case, our alternative prayer is that the mandate and decree of this Court be modified, *by instructing the District Court to modify its decree by striking out section 3 thereof, and in place of section 5 thereof, dismissing the counterclaim except insofar as same is granted in the remainder of the decree.*

Respectfully submitted,

ALLEN & ALLEN,
BRUNINGA & SUTHERLAND,
Attorneys for Appellants.

This Petition is brought in good faith, and is believed to be sound in law.

MARSTON ALLEN,
Counsel for Appellants.

(Endorsed): Filed in U. S. Circuit Court of
Appeals, Jul. 28, 1942.

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[fol. 971] (Order Denying Petition of Appellants for Rehearing)

(Vacated by Order of September 8, 1942)

May Term, 1942

Monday, August 24, 1942.

The petition of the appellants for a rehearing in this cause has been considered by this Court, and It is now here Ordered by the Court that said petition be, and the same is hereby, denied.

August 24, 1942.

[fol. 972] (Motion of Appellants to Revise Decree, etc.)

Now come the appellants in the above entitled cause and pray the Court to modify or revise its decree on appeal here so that instead of generally affirming the judgment of the District Court, it do instead instruct the District Court to modify its decree which is affirmed, by omitting any findings except to the effect that the contract between the parties dated January 1st, 1929, has terminated as of December 1936, and that the devices of the defendants Exs. 1, 2, 3A, 4 and 5 do not infringe upon U. S. Letters Patent Re. 20,202 and by ruling that on the issues joined on the Supplemental Bill and the Counterclaim, no further findings are required; and appellants also pray for such other relief, in the alternative, as may be grantable to them under the circumstances to be briefly outlined below.

We pray further that the mandate be stayed pending determination of this motion.

Facts and Objects of the Motion

We quote herewith the decree of the District Court in this cause (filed November 13, 1941):

"This cause having come up to be heard on the bill of complaint, supplement to the bill of *compla-nt*, answer to the bill of complaint, answer to the supplement to the bill of complaint and counterclaim, trial having been had on the issues joined, briefs having been filed, and the court

having filed its findings of fact and conclusions of law, it is hereby

Ordered, Adjudged, and Decreed that:

1

Exhibits 1, 2, 3A, 4 and 5 do not infringe Reissue Patent [fol. 973] No. 20,202.

2

The original contract of January 1, 1929, between the parties hereto, was terminated as of December 8, 1936, the date of the reissue patents. Since that time no new contract has been entered into.

3

Freeman was evicted from any monopoly on a machine on the date of the decision in *Freeman v. Premier Machine Co.*, June 5, 1936. On that same date he was evicted from (fol. 109) claiming any scope for a mask die beyond that set forth in the Findings of Fact herein filed. On the date of his disclaimer, November 11, 1936, these facts became fixed and unchangeable by the filing of the disclaimer. The original Freeman patent No. 1,681,033, became invalid November 11, 1936. The reissue patents 20,202 and 20,203 are invalid.

4

The bill of complaint and the supplement thereto are hereby dismissed.

5

The issues on the counterclaim are found in favor of defendants and the counterclaim is granted as herein set forth.

6

The costs of this suit are awarded to the defendants.

Charles B. Davis, United States District Judge."

It will be noted that this decree finds among other things that Reissue Patents Nos. 20,202 and 20,203 of the plaintiffs [fol. 974] are invalid, and that the counterclaim of the defendants is granted, which counterclaim (as the record will show), contains among other things a prayer that plaintiffs be found guilty of unclean hands.

As to all matters in the decree but those of infringement of the Exhibits 1, 2, 3A, 4 and 5, and that the contract was terminated, this Court ruled at the conclusion of its decision:

"In view of the conclusion already reached, we pretermitt consideration of the other contentions urged by appellants (meaning the defendants or appellees) as unnecessary in the decision of this case."

The decree of this Court handed down July 15, 1942, upon appeal from the decree of the District Court, reads as follows:

"In consideration hereof, it has now been ordered by the Court that the judgment of said District Court in this cause be and the same is hereby affirmed with costs, and that A. W. Altwater and The Western Supplies Co., have and recover against Benjamin W. Freeman and The Louis G. Freeman Company, the sum of \$20.00 for their costs herein and have execution therefor."

This decree of this Court affirmed the District Court decree *generally*. This we submit was an error, and should be corrected because the affirmed decree contains findings 3 and 5 as to which this Court ruled that consideration thereof was not called for to support the conclusion of affirmance. We rely on the authority of *Electrical Fittings Corp. v. Thomas and Betts Co.*, 307 U. S. 241; *Richard Irvin Co. v. Westinghouse Air Brake Co.*, 121 Fed. 2nd, 429 and *L. McBrine Co. Ltd. v. Silverman et al.*, 121 Fed. 2nd, 181.

[fol. 975] Benjamin W. Freeman and The Louis G. Freeman Company, by Allen & Allen, Attorneys for Appellants.

Marston Allen.

[Endorsed:] Filed in U. S. Circuit Court of Appeals, Aug. 31, 1942.

[fol. 976] (Order of Submission on Motion of Appellants to Revise Decree)

September Term, 1942

Saturday, September 5, 1942.

This cause came on this day for hearing upon the motion of appellants to revise the decree of this Court on the opin-

ion heretofore filed. After hearing counsel, Mr. Marston Allen for appellants and Mr. Edmund C. Rogers for appellees, the said motion, together with briefs in support and in opposition, is submitted to the Court composed of Judges Gardner and Johnsen. The motion, with the briefs in support and in opposition, will be submitted to Judge Woodrough as the third Judge.

[fol. 977] (Order Vacating and Setting Aside Order of August 24, 1942, Denying Petition of Appellants for Rehearing)

September Term, 1942

Tuesday, September 8, 1942.

Ordered: by the Court that the order of this Court entered August 24, 1942, denying the petition of appellants for a rehearing be, and the same is hereby, vacated and set aside, having been improvidently entered.

September 8, 1942.

[fol. 978] (Opinion)

UNITED STATES CIRCUIT COURT OF APPEALS, EIGHTH CIRCUIT,
SEPTEMBER TERM, A. D. 1942

No. 12,241

BENJAMIN W. FREEMAN, et al., Appellants,

vs.

A. W. ALTVATER, et al., Appellees

Appeal from the District Court of the United States for
the Eastern District of Missouri

(September 28, 1942)

Mr. Marston Allen (Messrs. Allen & Allen and Messrs. Bruninga & Sutherland were with him on the petition for rehearing and brief on motion to revise decree and stay mandate) for Appellants.

Mr. Edmund C. Rogers (Mr. Lawrence C. Kingsland and Messrs. Kingsland, Rogers & Ezell were with him on the

brief in opposition to motion to revise decree and stay mandate) for Appellees.

On Petition for Rehearing and Motion to Revise Decree and Stay Mandate

Before Gardner, Woodrough and Johnsen, Circuit Judges

[fol. 979] GARDNER, Circuit Judge:

In our opinion in this case, we directed that the decree appealed from be affirmed (*Freeman, et al. v. Altwater, et al.*, 129 F. 2d 494). Plaintiffs filed petition for rehearing, which was denied, whereupon they filed motion to modify the opinion and revise the decree on appeal which generally affirmed the decree of the trial court. On presentation of this motion we set aside our order denying petition for rehearing as having been improvidently entered and reinstated plaintiffs' petition for rehearing. The matter is now before us both on petition for rehearing and motion to modify the opinion and revise our decree on appeal.

In its decree the trial court adjudged (1) that defendants' accused devices did not infringe plaintiffs' reissue patent No. 20,202; (2) that the original contract of January 1, 1929 between the parties terminated December 8, 1936, and that no new contract had since been entered into; (3) that Freeman was evicted from the monopoly protected by his patent by the decision in *Freeman v. Premier Machine Company* on June 5, 1936; that the original Freeman patent No. 1,681,033 became invalid November 11, 1932 and that the reissue patents Nos. 20,202 and 20,203 were invalid; (4) that the bill of complaint and the supplemental bill be dismissed; (5) that the issues on the counterclaim are found in favor of the defendants. Being of the view that the trial court properly dismissed plaintiffs' bill of complaint and supplemental bill because defendants were no longer licensees and that their accused devices did not infringe plaintiffs' reissue patent No. 20,202, we affirmed the decree without considering the question of the validity of plaintiffs' patents. We also put aside as unnecessary for decision the contention of defendants that plaintiffs had entered into license and lease agreements by which they attempted to monopolize and limit competition in [fol. 980] unpatented dies and machines, and we thought it unnecessary to consider the question of the validity of

plaintiffs' patent as we concluded that the trial court's finding of non-infringement could not be set aside as clearly erroneous. On their motion to modify the opinion and revise our decree on appeal, appellants have brought sharply to our attention the effect of a general affirmance of the decree appealed from, pointing out that the general affirmance is broader than our opinion warrants.

The trial court having found no contract of license between the parties and having found no infringement, the other issues became moot and there was no longer a justiciable controversy between the parties. *L. McBrine Co., Ltd. v. Silverman*, 9 Cir., 121 F. 2d 181; *Richard Irvin & Co., Inc. v. Westinghouse Air Brake Co.*, 2 Cir., 121 F. 2d 429; *Electrical Fittings Corp. v. Thomas & Betts Co., et al.*, 307 U. S. 241. When we sustained the decree on the ground of lack of infringement, we pretermitted consideration of the claim of invalidity of plaintiffs' patents, but we did not order a modification of the decree appealed from, and both parties now assert that the decree of the lower court, if permitted to stand, will be res judicata between the parties on that issue. In *L. McBrine Co., Ltd. v. Silverman, supra*, the Circuit Court of Appeals of the Ninth Circuit determined that none of the claims in suit were infringed. The judgment below was bottomed on infringement. The court, among other things, said:

"We affirm the dismissals; not, however, on the ground assigned by the trial court, but on the ground that no infringement was shown. * * * No infringement being shown, we have no occasion to consider whether the evidence does or does not support the trial court's findings and conclusions respecting the invention said to have been made [fol. 981] by Maurice Koch. We accordingly leave that question undecided.

"Both judgments contain the following declaration: 'That claims 4, 8, 10, 11, 12, 19, 23, 24, 26 and 27 of letters patent of the United States No. 1,878,989, granted on September 20, 1932, to Emanuel J. Shoemaker, assignor to The L. McBrine Company, a corporation, being the patent claims sued on in this cause, are, and each of them is, void and invalid in law.' For reasons previously stated, the declaration is unnecessary. As to its correctness or incorrectness, we express no opinion.

"The judgments are modified by striking therefrom the above quoted declaration. As thus modified, the judgments are affirmed."

In *Richard Irvin & Co., Inc. v. Westinghouse Air Brake Co., et al., supra*, the patent involved had been held invalid and not infringed by the lower court. After affirming the lower court as to non-infringement, the court said:

"We do not find it necessary to decide the issue of validity. The judgment will be reversed, so far as it held the patent invalid because that issue became moot as soon as it appeared that the defendant did not infringe; but it will be affirmed on the issue of infringement."

In *Electrical Fittings Corp., et al. v. Thomas & Betts Co., et al., supra*, the Supreme Court had before it a decree in which the District Court had held one claim of a patent valid but not infringed and another claim invalid. The trial court had entered decree adjudging one claim valid but dismissing the bill for failure to plead infringement. The court points out that the decree appealed from purports to adjudge the validity of one of the claims and then proceed to say that,

[fol. 982] " * * * though the adjudication was immaterial to the disposition of the cause, it stands as an adjudication of one of the issues litigated. We think the petitioners were entitled to have this portion of the decree eliminated, and that the Circuit Court of Appeals had jurisdiction, as we have held this court has, to entertain the appeal, not for the purpose of passing on the merits, but to direct the reformation of the decree. The judgment is reversed, and the cause is remanded to the Circuit Court of Appeals with instructions to entertain the appeal and direct the District Court to reform its decree in accordance with the views herein expressed."

By their counterclaim defendants sought a declaratory judgment, but, as already observed, when the court found no infringement, there then remained no justiciable controversy. *Ashwander v. Tennessee Valley Authority*, 297 U. S. 288; *Aetna Life Ins. Co. v. Haworth*, 300 U. S. 227.

It follows that the general affirmance of the decree appealed from, directed by our former opinion, should be

and is modified by eliminating therefrom paragraphs 3 and 5, adjudging plaintiffs' reissue patents Nos. 20,202 and 20,203 invalid, adjudging Freeman to have been evicted from the monopoly of his patent on June 5, 1936, and adjudging the issues on defendants' counterclaim in favor of defendants. We express no opinion as to the issues involved in the paragraphs of the decree so eliminated. As so modified, the decree appealed from is affirmed. Except as otherwise directed herein, the petition for rehearing and the motion are denied.

[fol. 983] (Order on Petition for Rehearing and Motion to Modify, etc., Filed by Appellants)

UNITED STATES CIRCUIT COURT OF APPEALS, EIGHTH CIRCUIT,
SEPTEMBER TERM, 1942

No. 12241

Monday, September 28, 1942.

BENJAMIN W. FREEMAN and THE LOUIS G. FREEMAN COMPANY, Appellants,

vs.

A. W. ALTVATER and THE WESTERN SUPPLIES COMPANY

Appeal from the District Court of the United States for
the Eastern District of Missouri

This cause came on to be heard on the petition for rehearing and motion to modify the opinion and revise the decree of this Court which generally affirmed the decree of the District Court, filed by counsel for appellants.

On Consideration Whereof, it is now here Ordered and Adjudged by this Court that the decree appealed from should be, and it is hereby directed to be, modified by eliminating paragraphs 3 and 5 from said decree. As so modified, the decree of said District Court appealed from is by this Court hereby affirmed.

And it is further ordered by this Court that except as otherwise directed herein the petition for rehearing and the motion are each hereby denied.

September 28, 1942.

IN THE
United States Circuit Court of Appeals
FOR THE EIGHTH CIRCUIT.

BENJAMIN W. FREEMAN and THE
LOUIS G. FREEMAN COMPANY,
Appellants,

vs.

A. W. ALTVATER and THE WESTERN
SUPPLIES COMPANY,
Appellees.

No. 12,241.

APPELLEES' PETITION FOR REHEARING.

Defendants-appellees hereby Petition for Rehearing, of the decision of this Court in the above suit, dated September 28, 1942, on Petition for Rehearing and Motion to Reverse Decree and Stay Mandate, and for Stay or Recall of the Mandate issued as a result thereof.

The fact that defendants now petition for rehearing, and that plaintiffs formerly petitioned for rehearing is evidence that complete justice cannot be done in this case without adjudging the merits of the counterclaim.

I

One of the important things overlooked by the Court in directing that the counterclaim be dismissed is that the controversy of the counterclaim is not limited to the two dies that formed the basis of the bill. Stated differently, the counterclaim was not merely a petition for declaratory judgment on the matters of the Bill of Complaint.

As a matter of fact, the two dies actually sued upon were very minor relative to the total dies sold under the original license. Hundreds of different types of dies were sold throughout the license period and were paid on up until the decision of Judge Davis in the court below. These were concededly under the scope of the original contract, if any contract existed.

The question that was of the essence of the counterclaim, and which this Court overlooked, is this: what can defendants do about the business in these hundreds or, indeed, thousands of other dies now that they are without a license?

Can defendants go on making these other dies, as since the ruling of Judge Davis affirmed by this Court, defendants have no license. Are defendants liable for all of the profits they made on them in an infringement suit? Are defendants liable to an injunction to stop their making them? Are defendants to continue this business legitimately started under the license, only at the hazard of losing all of their profit in the business, or of losing damages which could exceed the profit, or of being enjoined from the business?

The Court will see that this was an issue that clearly remained after the two relatively insignificant dies actually adjudged were held not to infringe. Hence, the Court's statement that "when the Court found no infringement there then remained no justicial controversy" is completely in error.

Likewise, the Court's statement that "The trial court having found no contract of license between the parties and having found no infringement, the other issues became moot and there was no longer a justiciable controversy between the parties," is also in error. The very fact that the Court found no contract, as we contended there was none, left wide open the hundreds of issues on hundreds of other types of dies.

By this same token the decisions cited by the Court are not in point. In all of the cases cited there were no issues outside of the devices actually accused in the several suits. Here the issues of the bill are very minor compared to those of the counterclaim.

Our clients are in a state of complete bewilderment. They do not know whether they are to be enjoined in another lawsuit, if they continue the business that they legitimately built up, or not. They do not know whether Freeman has any patents upon which they could take a new license. The lower court has ruled that Freeman has no such patents. This Court refuses to decide, but this Court has deprived the ruling of Judge Davis of its power as *res adjudicata*.

It seems highly likely that this Court was misled by a statement on page 3 of plaintiffs' Petition for Rehearing that "This Court has found that the dies made by defendants as charged in the Bill of Complaint are not infringements, and hence whether the reissues patents are valid or invalid, has no bearing on the controversy made by the bill." Validity surely bears upon the different issues of the counterclaim.

It has been said that all litigation must come to an end some time, even patent litigation. The attitude of plaintiffs is that this matter of validity should be left for a later suit. Of all of the futile operations, and of all of the delaying tactics in litigation that started thirteen years ago and has continued unabated ever since, that is the worst.

II.

Another thing overlooked by this Court is that in reversing the District Court on the counterclaim this Court has not only lent its sanction to patents that are being grossly improperly used, but it has placed its affirmative stamp of approval on such use by going out of its way to reverse the holding of the District Court that the patents are invalid.

Let us make no mistake about what this Court has done. It has reversed the District Court on the counterclaim. That is an affirmative step by this Court in furtherance of an illegally operated monopoly.

It has done so, we submit, through inadvertence. This Court does not realize that it was not merely refusing to decide a point, but was actually taking a positive step to further and to continue an improper monopoly.

This Court has the licenses before it, Exhibits A1-A23, inclusive, and the leases. These licensees represent just about all of the die manufacturers in the country. In making this license many of the other die manufacturers agreed not to make any competing dies, even unpatented ones. Shoe manufacturers were permitted to buy dies only from licensed die makers, even though the dies were unpatented. These provisions, which flout the latest decisions of the Supreme Court, are the ones that this Court has gone out of its way to approve, however indirectly.

And if this Court insists that these defendants shall have to subject themselves to more litigation in order to maintain their business without license, it appears that this Court desires defendants to enter into a license, thus further tightening the monopolistic hold of Freeman. For, if defendants have to make a new license, they will never then be permitted again to contest validity.

Surely this Court will not knowingly adhere to a position that deciding two minor issues on the bill against infringement disposes of the hundred of obviously different issues on the counterclaim that concededly did infringe. Most surely this Court would not intentionally and knowingly go out of its way, as it has done, to put its approval upon a monopoly of the kind that plaintiffs have maintained under these patents.

That octopus of monopoly was struck dead by the lower court. This Court has brought it back to life.

Respectfully submitted,

LAWRENCE C. KINGSLAND,
EDMUND C. ROGERS,
Attorneys for Appellees.

KINGSLAND, ROGERS & EZELL,
Of Counsel.

St. Louis, Mo.,
October 13, 1942.

The foregoing petition is filed in good faith
and is believed to be meritorious.

Edmund C. Rogers

(Endorsed): Filed in U. S. Circuit Court of
Appeals, Oct. 13, 1942.

[fol. 989] (Order Denying Petition of Appellees for Rehearing)

November Term, 1942

Tuesday, November 3, 1942.

The petition for rehearing filed by counsel for appellees in this cause having been considered, It is now here ordered by this Court that the same, be, and it is hereby, denied.

November 3, 1942.

[fol. 990] (Clerk's Certificate)

UNITED STATES CIRCUIT COURT OF APPEALS, EIGHTH CIRCUIT

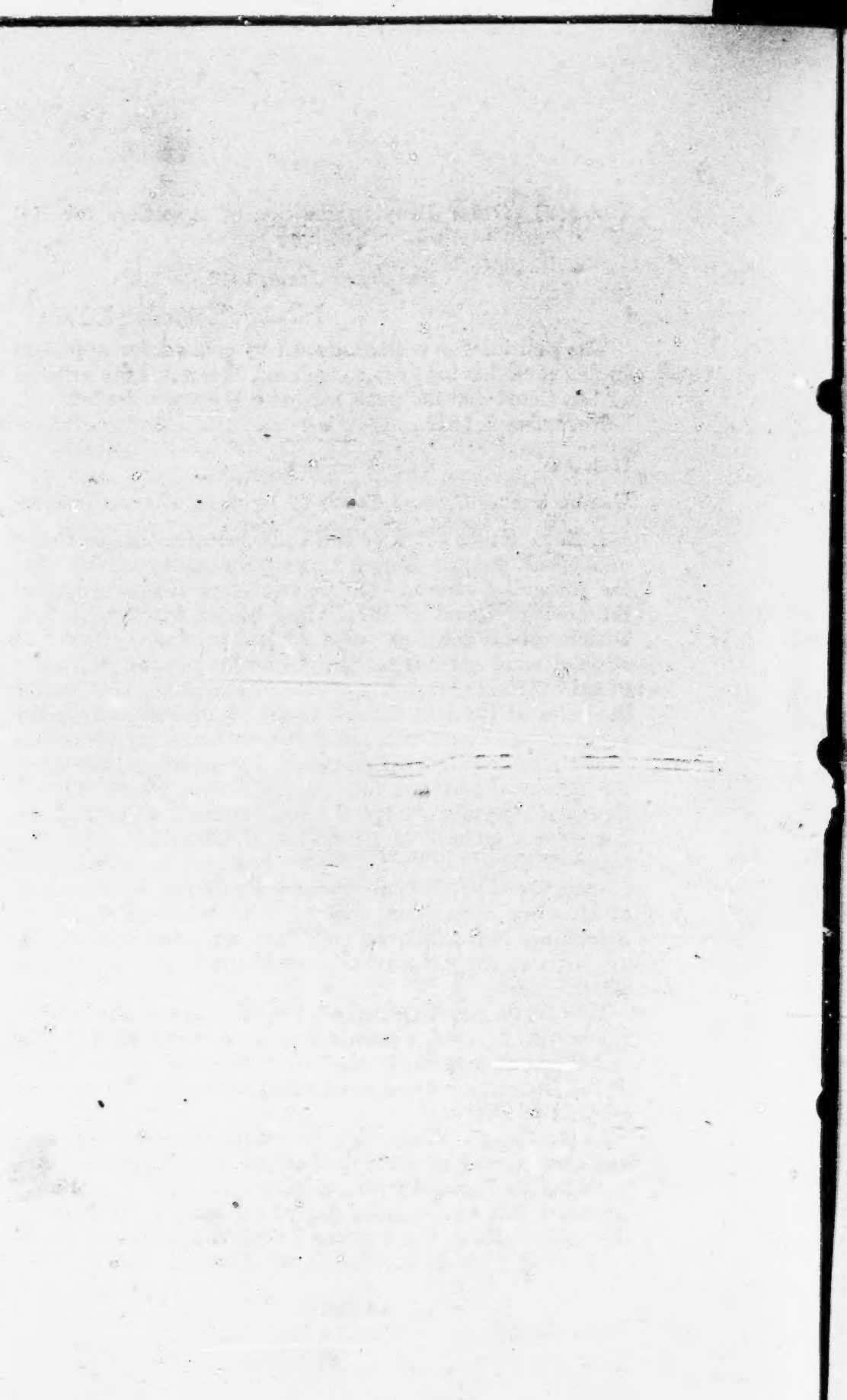
I, E. E. Koch, Clerk of the United States Circuit Court of Appeals for the Eighth Circuit, do hereby certify that the foregoing contains the transcript of the record from the District Court of the United States for the Eastern District of Missouri as prepared and printed, pursuant to stipulation of counsel for the respective parties and order of said Circuit Court of Appeals of March 10, 1942, under the rules of the said Circuit Court of Appeals, under the supervision of its Clerk, and full, true and complete copies of the pleadings, record entries and proceedings, including the opinions, had and filed in the United States Circuit Court of Appeals, except the full captions, titles and endorsements omitted in pursuance of the rules of the Supreme Court of the United States, in a certain cause in said Circuit Court of Appeals wherein Benjamin W. Freeman, et al., were Appellants, and A. W. Altvater, et al., were Appellees, No. 12241, as full, true and complete as the originals of the same remain on file and of record in my office.

I do further certify that on the seventeenth day of November, A. D. 1942, a mandate was issued out of said Circuit Court of Appeals in said cause, directed to the Judges of the District Court of the United States for the Eastern District of Missouri.

In Testimony Whereof, I hereunto subscribe my name and affix the seal of the United States Circuit Court of Appeals for the Eighth Circuit, at office in the City of St. Louis, Missouri, this twenty-third day of January, A. D. 1943.

E. E. Koch, Clerk of the United States Circuit Court of Appeals for the Eighth Circuit. (Seal.)

(4432)



[fol. 991] SUPREME COURT OF THE UNITED STATES, OCTOBER
TERM, 1942

No. 696

ORDER ALLOWING CERTIORARI—Filed March 8, 1943

The petition herein for a writ of certiorari to the United States Circuit Court of Appeals for the Eighth Circuit is granted.

And it is further ordered that the duly certified copy of the transcript of the proceedings below which accompanied the petition shall be treated as though filed in response to such writ.

(5510)